Click in this page to return to water softener information at InspectApedia.com

waterBoss®

INSTALLATION AND SERVICE MANUAL

Water Softeners: waterBoss® - cityBoss® - BigBoss®
Filters: Iron Filter - Carbon Filter - Acid Netralizing Filter

waterBoss® 4343 S. Hamilton Road, Groveport, Ohio 43125

Congratulations

on your decision to place your confidence in a superior ***waterBoss***® water treatment appliance.

Recognized worldwide for built-in quality, dependability, and ease of service, ***waterBoss***® appliances represent state-of-the-art in home water treatment. Important information is contained in this manual which will help you get the maximum benefit and enjoyment from your particular model.

We urge you to read this information carefully now and any time a malfunction may occur. In most cases, these reviews will uncover minor problems that you can correct yourself, thereby saving you time.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Table of Contents

QUESTIONS? 1
GETTING MAXIMUM EFFICIENCY FROM YOUR APPLIANCE 2
INSTALLATION CHECKLIST 3
DO'S AND DONT'S 4
REFERENCE ILLUSTRATIONS 5
CYCLES 10
ALL WATER CONDITIONERS ARE NOT CREATED EQUAL 12
INSTALLATION AND START-UP PROCEDURES 13
SETTING THE 3 BUTTON CONTROLLER 15
CARE, MAINTENANCE AND PARTS 18
TROUBLESHOOTING 32
cityBoss® HARDNESS SETTING CHART 34
97WB-ANF ACID NETRALIZING FILTER START-UP PROCEDURES 35
97WB-IF IRON FILTER START-UP PROCEDURES 36
97WB-CF CARBON FILTER START-UP PROCEDURES 37
PARTS APPENDIX 38
SOFTENER SPECIFICATIONS 40
FILTER SPECIFICATIONS 41
LIMITED WARRANTY 42

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Questions

From 8 am to 5 pm EST, use the 800 HelpLine: 1-800-437-8993
The HelpLine is available to help answer questions about specific water problems, appliance installation and operation. When calling the HelpLine, please have this guide and the serial number of your appliance available. . Your serial number may be found on top of your valve assembly (See figures 2-3.)

Date of Installation: _____

Model Number: _____

Serial Number: _____

Returned Limited warranty Card Date: _____

How To Get The Maximum Efficiency From Your Appliance

CAUTION: If you have purchased the ***waterBoss***® Iron Filter, (Model 97WB-IF) do not add salt to the cabinet as shown on page 9. Follow the instructions for the iron filter on page 36 of this manual. If you have purchased the 97WB-CF or 97WB-ANF, these are "backwash only" appliances. Do not add water, salt or any other type of regenerant. Refer to start-up procedures for these models on pages 35 and 37.

1. Fill salt cabinet when water level is above salt level. DO NOT MIX DIFFERENT TYPES OF SALT. If iron is present in your water, use a salt with an iron-cleaning additive to help keep resin clean. You may also use a resin cleaner on a monthly basis in place of salt with cleaning additives. If iron is not present in your water, a clean pellet, solar or cube type salt is recommended. The use of rock salt is not recommended because it contains impurities that can plug up the injector assembly.

2. You may use a salt substitute (such as potassium chloride) in place of water conditioner salt. If you start with water conditioner salt, you can switch to a salt substitute at any time - or vice versa. If potassium chloride is used in place of nugget or pellet salt, increase your hardness setting by 12% (multiply by 1.12). Do not use Potassium Chloride if there is iron in your water.

3. Should your electricity be turned off for any reason you must reset the time of day if you programmed your appliance for delayed regeneration.* (see page 16)

4. Protect your system from freezing, including drain line.

5. By-pass the appliance when servicing the well, plumbing, or pump. When work is completed, turn on the nearest cold water tap until water runs clear before putting appliance back in service. See figures 4 - 5 - 6.

* Excludes ***cityBoss***® model.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Checklist Before Installation

1. ***Water Pressure*** - Not less than 20 psi constant for ***waterBoss®***, ***BigBoss®***,***cityBoss®***. Not less than 30 psi for *waterBoss® IRON, CARBON AND ACID NEUTRALIZING FILTERS.*

2. ***Double check hardness*** - of water with test strips provided to verify that your ***waterBoss®*** is the right appliance for the job.

   cityBoss® *FOR MUNICIPALLY-SUPPLIED WATER* is for water without iron and up to 25 grains of hardness per gallon.

   waterBoss® for up to 70 grains hardness per gallon.

   BigBoss® for up to 90 grains hardness per gallon. (See specifications, page 40.)

3. ***Water Supply Flow Rate*** - 5 gallons per minute is recommended as minimum.

4. ***Drain*** - Drain appliance to floor drain or washer drain. To prevent back-siphoning, the installer must provide an adequate air gap or a siphon break. See figure 1.

5. ***Electricity*** - The transformer supplied is a standard 120 volt, 60 cycle A.C. for USA or 220 volt, 50 cycle A.C. for outside the USA. See figure 8.

6. ***Water Quality*** - If the water supply contains sulfur, bacteria, iron bacteria, tannins, algae, oil, acid or other unusual substances, then unless the system is represented as being capable of treating these contaminates in the specifications, other special treatment of the water supply must be used to remove these contaminates before they enter this product.

   If you have any questions call our HelpLine!

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Do's And Dont's

SOME DO'S

1. Do comply with all local plumbing and electrical codes.
2. Do install pressure-reducing valve if inlet pressure exceeds 90 psi.
3. Do install gravity drain on salt storage cabinet. See figure 7.
4. Do secure drain line on appliance and at drain outlet. See figure 3.
5. Do allow a minimum of 8 to 10 feet of 3/4" pipe from the outlet of the water conditioner to the inlet of the water heater. See figure 1.

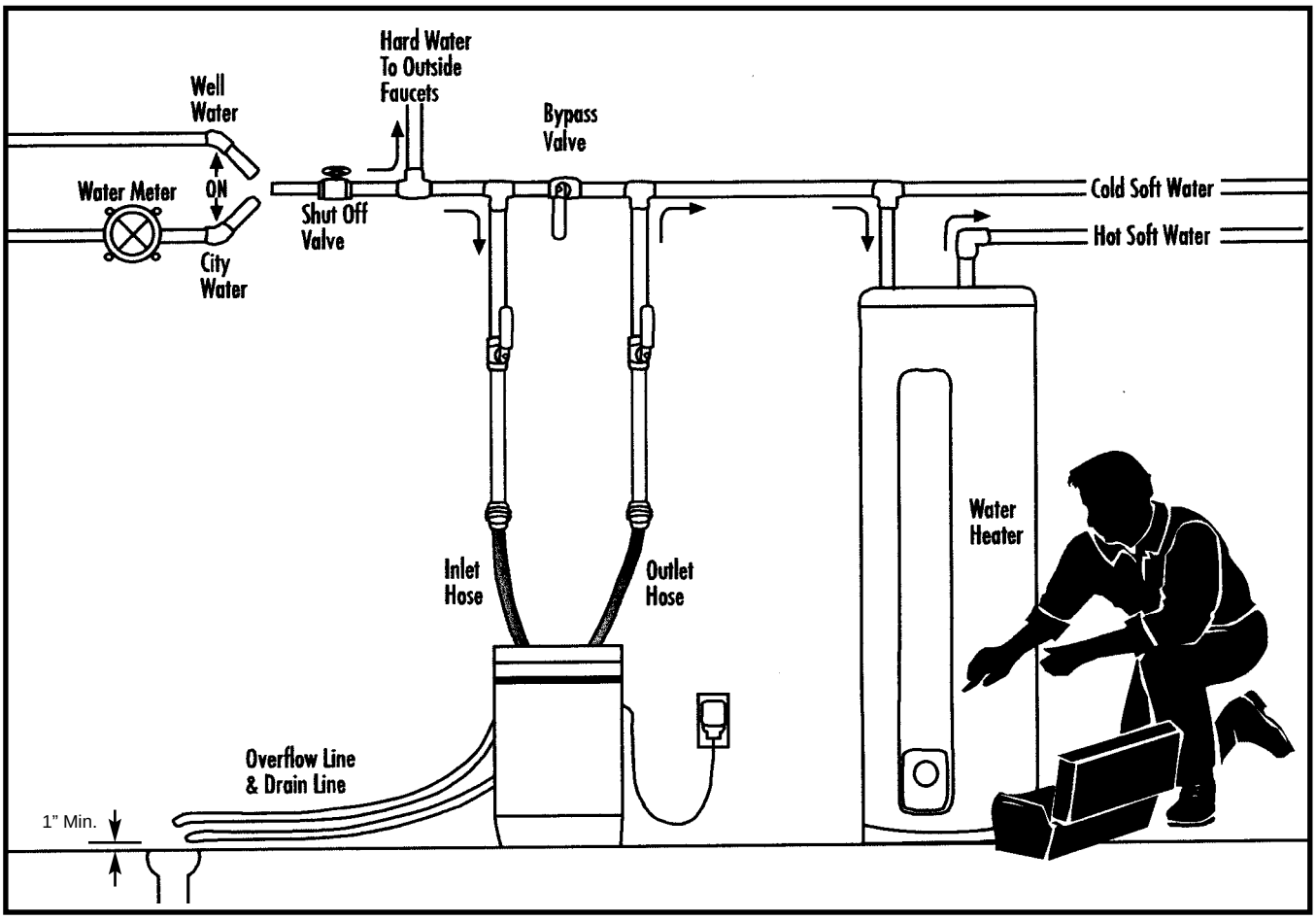
SOME DONT'S

1. Do not install if checklist items are not satisfactory.
2. Do not install if incoming or outlet piping water temperature exceeds 120 degrees Fahrenheit; 80 degress for Iron Filter. Please see specification on pages 40-41.
3. Do not allow soldering torch heat to be transferred to valve components or plastic parts.
4. Do not overtighten plastic fittings.
5. Do not place appliance right up against a wall which would deny access to plumbing. See figure 1.
6. Do not install the appliance backwards. Follow arrows on inlet/outlet. See figure 2.
7. Do not plug the transformer into an outlet that is activated by an on/off switch. See figure 8.
8. Do not connect the drain and the overflow (gravity drain) together. See figure 1.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Reference Illustrations

Figure 1- Installation Guide



Use this diagram as a location and installation guide for your ***waterBoss***®, ***BigBoss***®, and ***cityBoss***®, water conditioners. For additional information on filter installations please refer to pages 35, 36, and 37. This diagram applies to all types of installations (i.e. basement, slab, crawl space, outside).

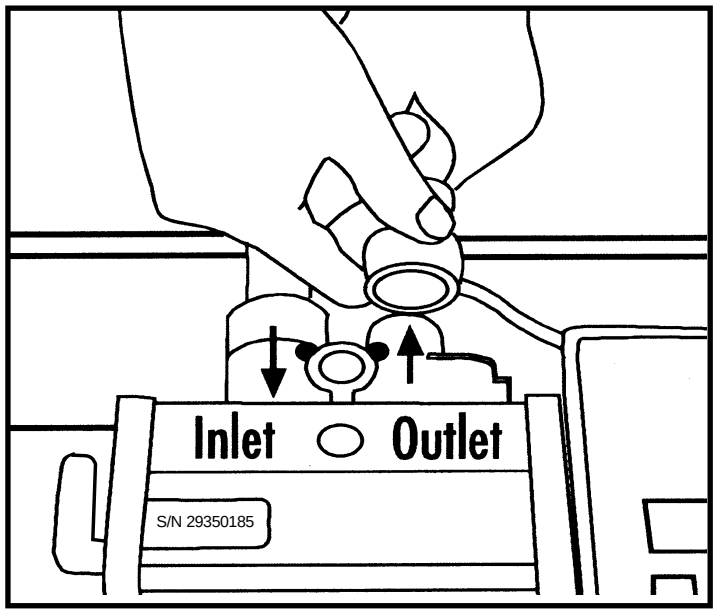
Bypass Valves. To simplify installation and servicing, a one-piece or a three way bypass valve system is recommended when installing your appliance. A bypass system also provides access to untreated water when required (i.e. for lawn and gardening purposes.) Also, see figures 4 through 6.

Caution: If less than 10 feet of pipe connect the water treatment appliance(s), to the water heater, then a Check Valve must be installed between the water treatment appliance and the water heater. Install the Check Valve as close to the water heater as possible.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

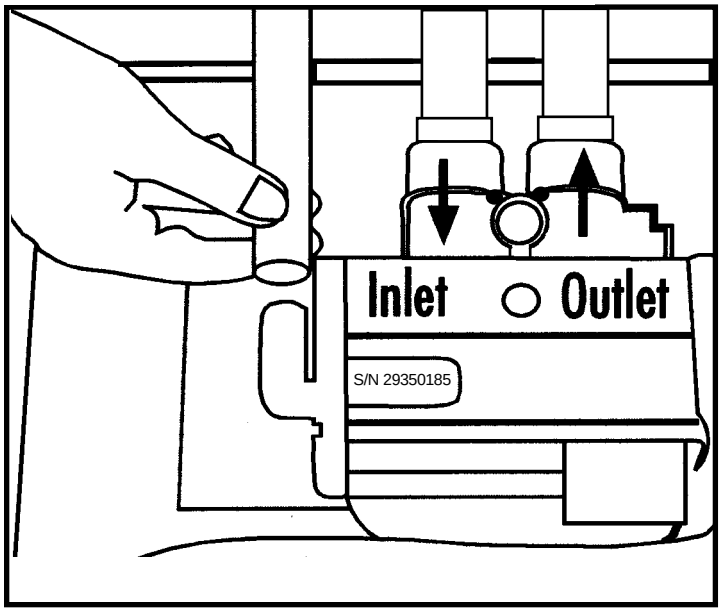
Reference Illustrations

Figure 2



PLUMBING CONNECTIONS

Figure 3



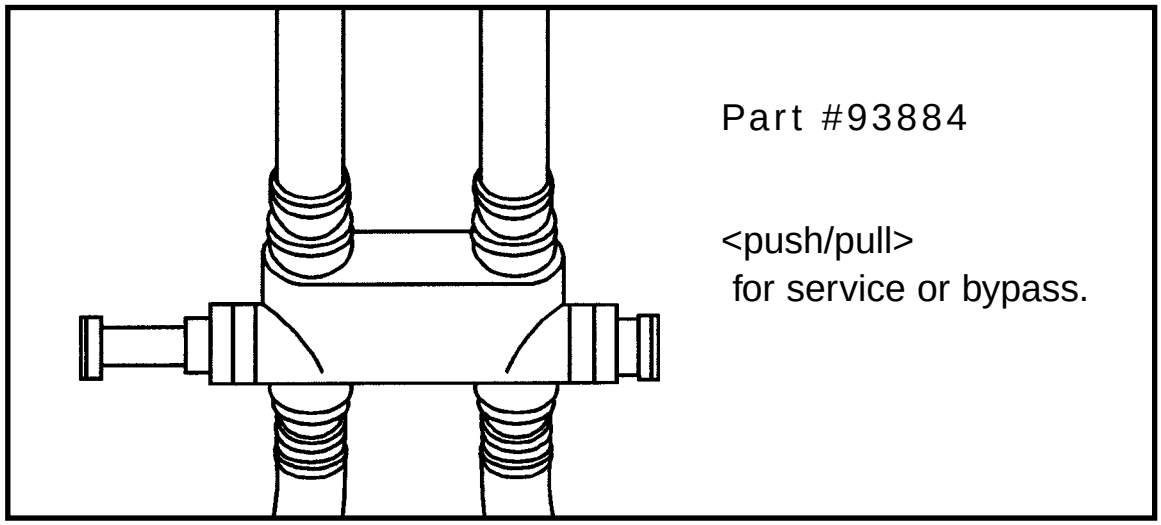
CONNECTING DRAIN LINE

CAUTION! The drain line must not be kinked, crimped or restricted in any way. The drain line 1/2" inside diameter cannot be reduced in size.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

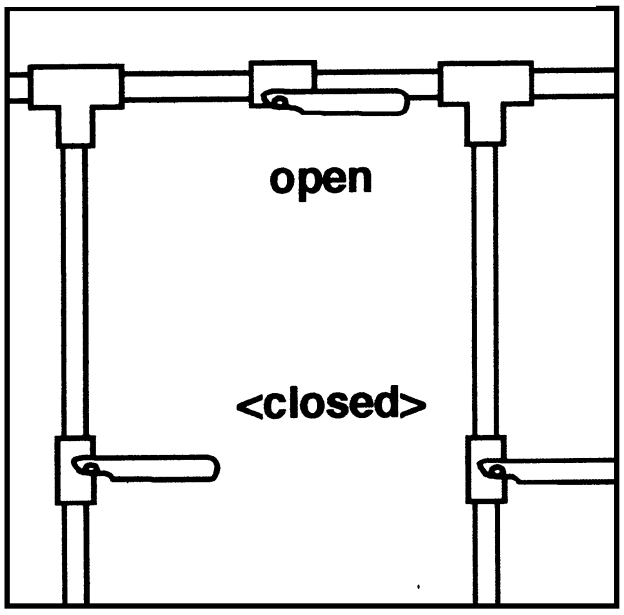
Reference Illustrations

Figure 4 Bypass Valves



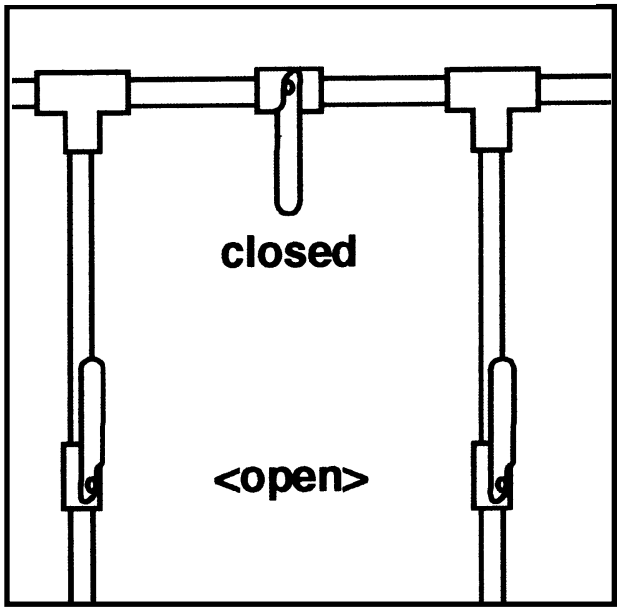
This part may be available through your local hardware store, plumber or call our HelpLine to order.

Figure 5



IN BYPASS POSITION

Figure 6



IN SERVICE POSITION

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Reference Illustrations

Figure 7

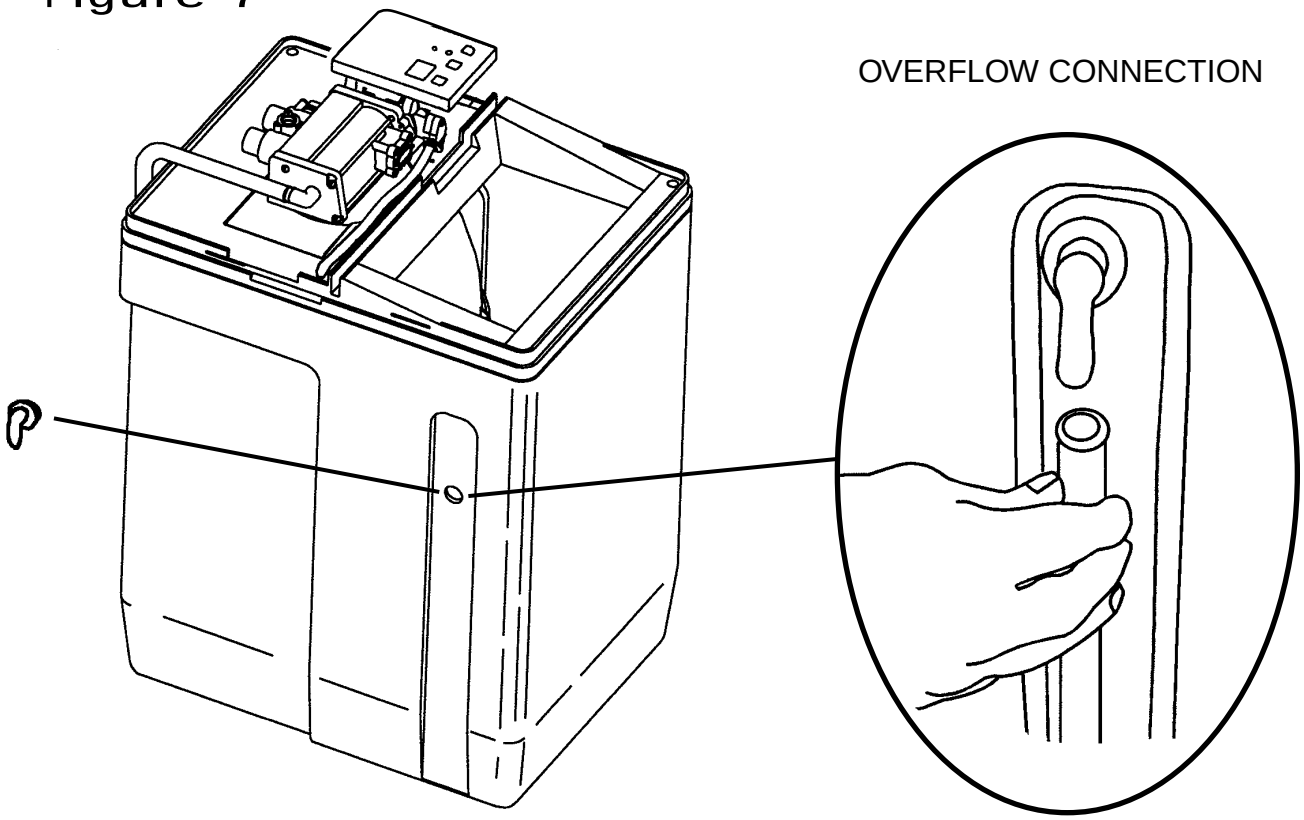
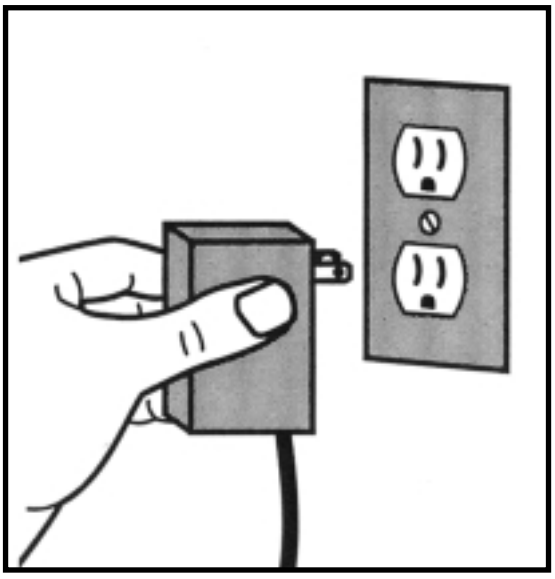


Figure 8



PLUGGING IN TRANSFORMER
Do not plug transformer into an outlet that is controlled by on/off switch.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Reference Illustrations

Figure 9

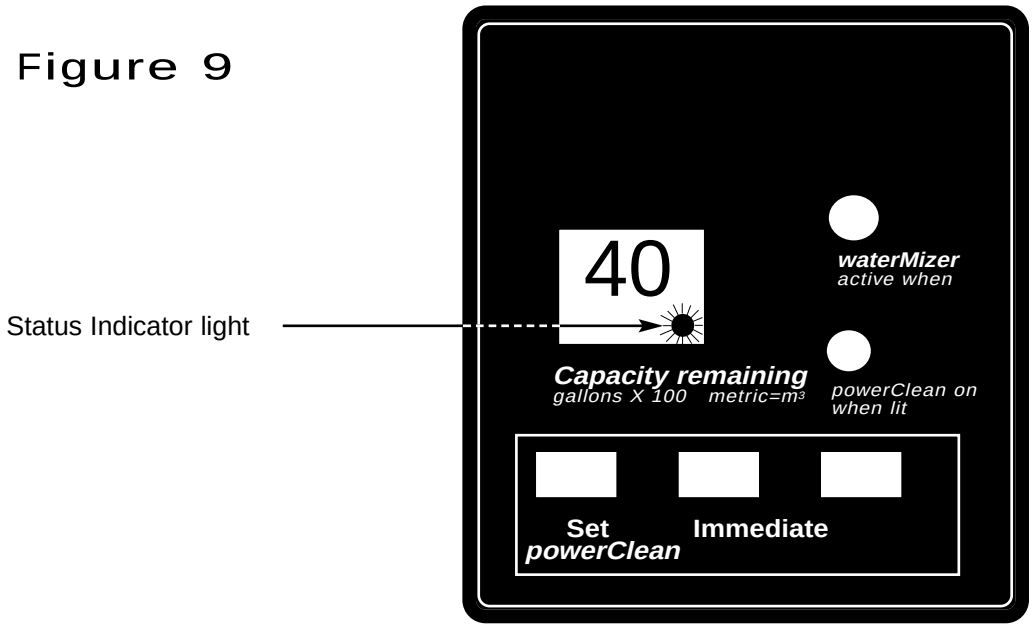
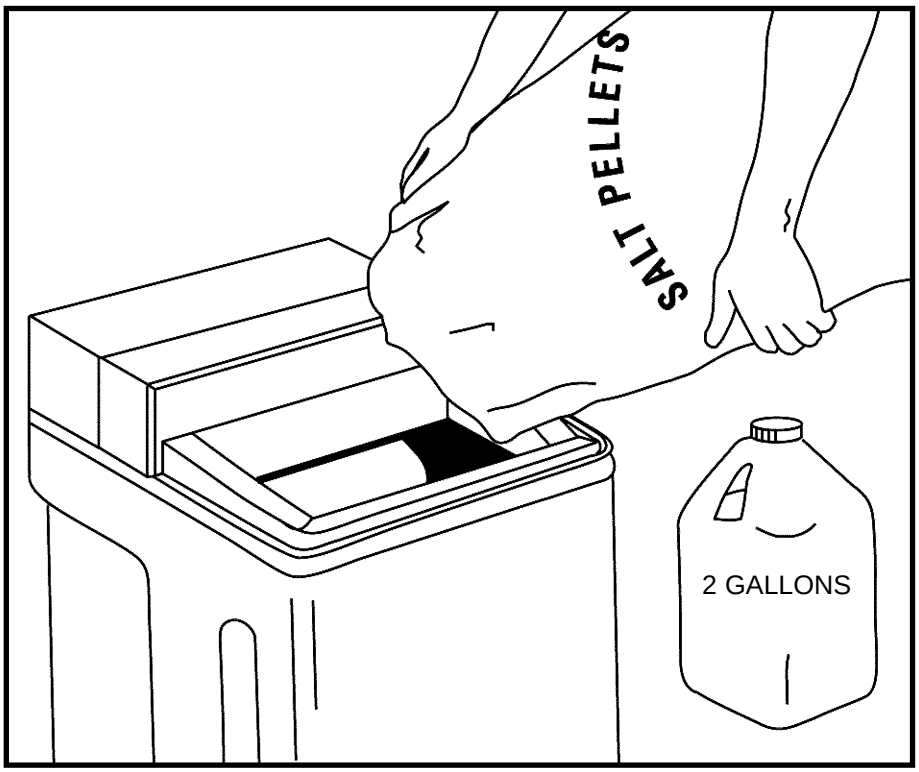


Figure 10



ADDING SALT TO
THE BRINE CABINET
(***waterBoss, BigBoss, and cityBoss*** softeners only)

Refer to page 36 for Iron Filter start-up procedures.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Cycles

Figure 11

Water by-passes your appliance during regeneration to allow iron, sediment, hardness, etc. to be washed down the drain. After regeneration, *waterBoss*® returns to service, providing your home with treated water.

Regeneration cycles:

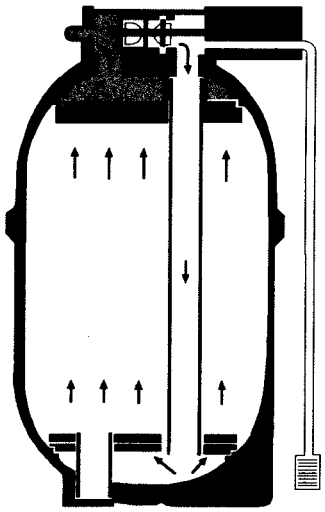
1. First up-flow backwash. A rapid up-flow of water flushes out the resin bed and cleans the sediment filter.
2. Brine*. Brine is drawn out of the brine cabinet and up through the media tank, cleaning the resin bed and releasing accumulated hardness and iron.
3. Slow rinse*. A slow up-flow rinse process then flushes out the brine, hardness and iron.
4. Second up-flow backwash. This up-flow backwash flushes out any remaining brine solution and sediment from cycle 2.
5. Downflow soft water brine refill. Soft water is directed to the brine cabinet to prepare the brine for the next regeneration sequence.
6. Return to service. Regeneration is complete and the appliance is returned to normal operation.

* Does not include 97WB-CF and 97WB-ANF. These fiters backwash only and do not require any regenerant.

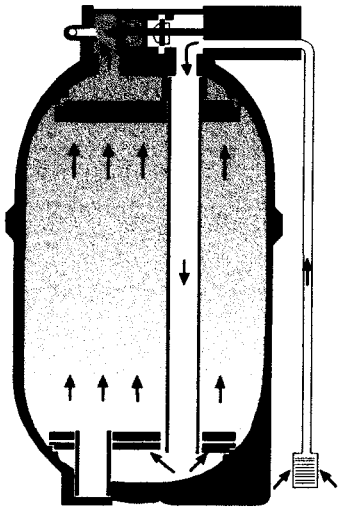
When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Cycles

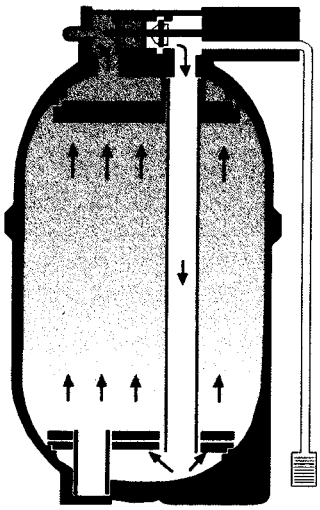
Figure 11



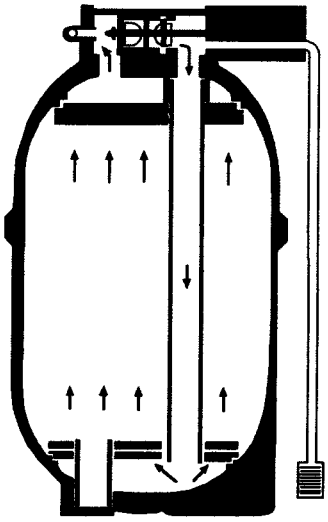
1 First up-flow backwash



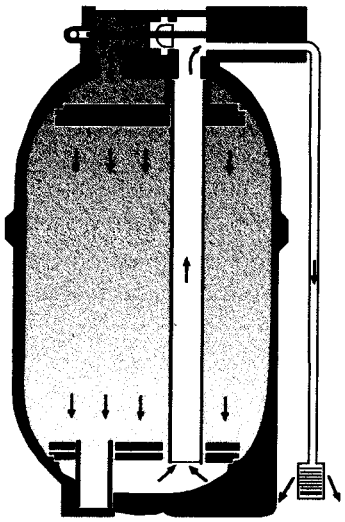
2 Brine



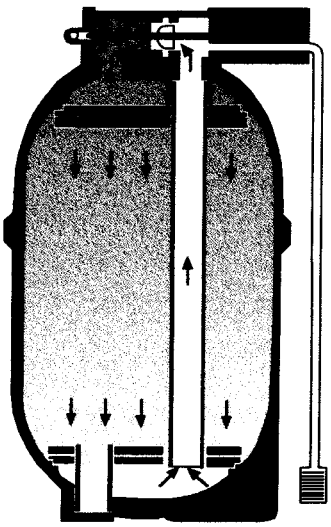
3 Slow Rinse



4 Second up-flow backwash



5 Downflow soft water brine refill

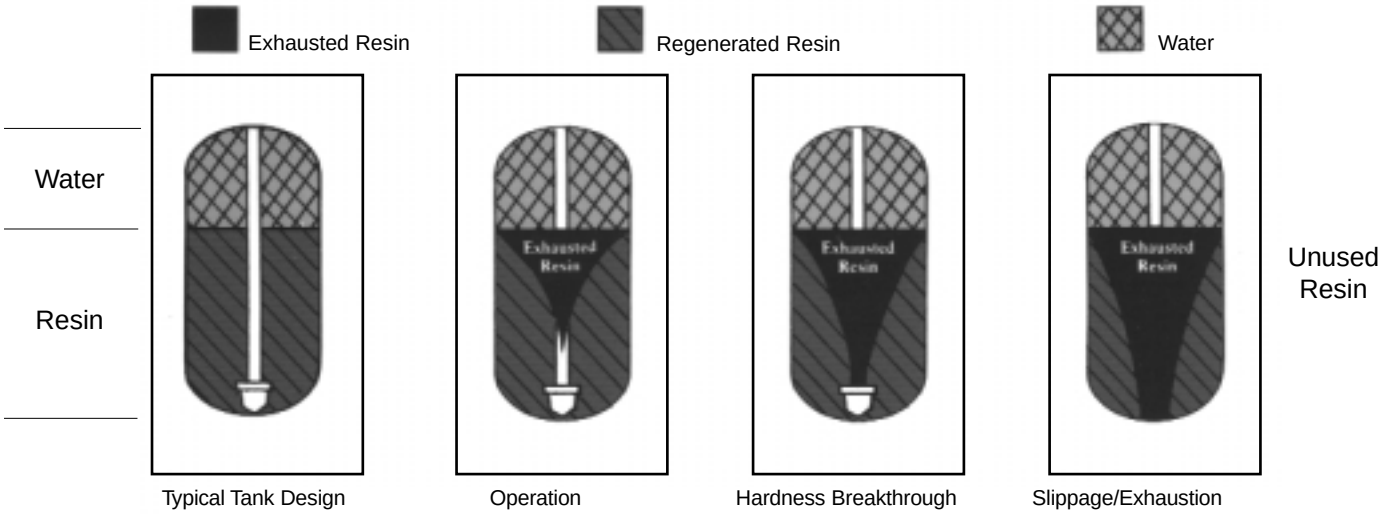


6 Return to service

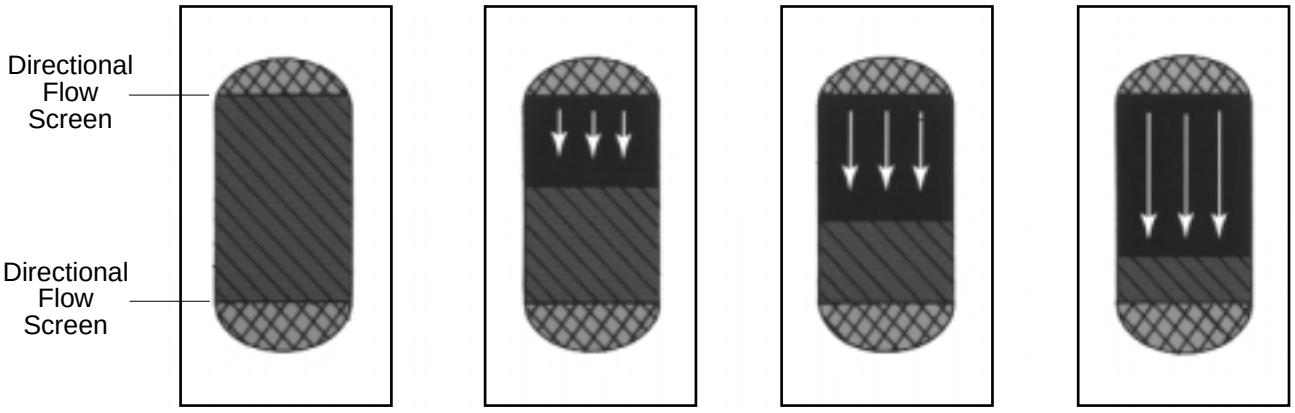
When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

All Water Conditioners Are Not Created Equal.

Conventional Water Conditioner Exhaust Pattern.
Much of your resin could be wasted!



Directional Flow Screen Distribution System
Directs flow evenly through bed for most efficient use.



Exhaust Pattern assures more usable resin capacity.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Installation And Start-Up Procedures

Each ***waterBoss***® water conditioner and filter includes two connecting hoses and 8' of drain line.

1. Placement: Place your ***waterBoss***® appliance in desired location. Turn off electricity and water supply to water heater. Make sure inlet/outlet and drain connections meet the applicable local codes. Check arrows on valve to be sure water flows in proper direction. See figures 1, 2, & 3. ***CAUTION: DO NOT PLUMB APPLIANCE IN BACKWARD.***

2. Drain Line: must be a minimum of 1/2"-5/8" I.D. tubing and should make the shortest run to a suitable drain. The drain line may be elevated up to 8 feet from the discharge on the appliance as long as the water pressure in your system is 40 psi or more. If drain line is 25' or longer, increase drain line to 5/8" I.D. Also, the end of the drain line must be equal in height or lower than the control valve. See figure 1. All overhead drains for filter installations must be 3/4" I.D.

3. Flushing: Before placing your *waterBoss*® appliance in service, it is very important to flush the cold water lines of any debris. Turn on water supply, open the nearest cold water tap and let the water run for 2 to 3 minutes until the water flows clear. Then put the by-pass in the Service position. See figures 4 through 6.

4. Check Leaks. Close faucet and check for leaks. If leaks are found, turn off main water supply and open the nearest cold water faucet to depressurize lines. Close faucet to eliminate siphoning action. Repair leaks. Turn on water supply and electricity to water heater. Place the bypass valve in the Service position. See figure 6.

5. Connect Overflow Line. The overflow line must end at a drain that is at least 3" lower than the bottom of the overflow fitting. It is a gravity line and cannot be run overhead. See figure 7.

6. Complete The Installation. Open a cold water tap and allow the appliance to flush for 20 minutes or until approximately 72 gallons has passed through the appliance per NSF requirements.

7. Plug In Transformer. See figure 8.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

8. Setting Number. For *waterBoss*®, *BigBoss*®, and *cityBoss*® for municipally-supplied water, determine your controller setting number. Do not guess at the setting; continued water quality problems or damage to the unit could result.

Municipal water - call your local water company to determine your water hardness in grains per gallon. This will be your setting number. Or, follow the instructions on the hardness test strip provided with your *cityBoss*® to determine your hardness reading. This will be your setting number.

Well water - follow the instructions on the pH and hardness test strips provided with your *waterBoss*® to determine the pH and hardness of your water.
Iron adjustment: if pH is 7 or above and you know your water has iron, add 15 to your hardness reading in grains per gallon and enter the result as your setting #.

Example: hardness in grains per gallon from test strip is 20 + 15 = 35 = setting #.
This is a temporary setting until you have an accurate water test.

If the result of your hardness test strip reaches the test maximum of 25 grains per gallon, mix 1 cup tap water with 1 cup distilled water, then retest for hardness. Multiply your reading x 2 and use this number as your setting number. If the test strip result is still 25 grains per gallon, call your HelpLine. Or, contact the company below to test for hardness, iron and pH.

WATERSCREEN
National Testing Laboratories, Inc.
1-800-458-3330 - 9 am - 5 pm EST

If you feel you have an abnormal amount of iron, push the powerClean® button for models *waterBoss*® and *BigBoss*® only. Also, be sure to use salt with an iron-cleaning additive. Be aware that *cityBoss*® for municipally-supplied water is not designed to treat water with iron. If pH is below 7, refer to acid neutralizing filters, page 41.

9. Adding Water & Salt. Be sure to remove any packaging or installation materials before adding salt. Next, add not more than 2 gallons of water to the brine cabinet. Then add salt to the brine cabinet, wait 2 hours then push the immediate recharge button and hold for 5 seconds. A regeneration cycle will begin and continue as follows: *BigBoss*® , 37 minutes; *cityBoss*® for municipally-supplied water, 26 minutes; and *waterBoss*®, 26 minutes. After the first regeneration, your softener will automatically refill the correct amount of water in the brine cabinet. See figure 10.

10. Refill Salt when the salt level drops below the water level in the brine cabinet. Always keep salt above water level. See figure 10

CAUTION! Failure to install, operate and maintain your water treatment appliance as instructed will VOID the product limited warranty.

NOTE! Make sure the Owner's Limited warranty Card is filled in and mailed within 30 days of installation. NO POSTAGE REQUIRED.

Setting The 3 Button Controller

DEMAND REGENERATION

You won't have to worry about vacation settings or extra guests because the controller measures water usage and regenerates based on need. The appliance will regenerate using only the necessary amount of water and salt. If power has been turned off, your appliance will retain programmed settings indefinitely. See figure 9.

1) ENTERING YOUR SETTING NUMBER
See page 14 for determining your setting number. The water hardness setting number shown in the digital readout will increase 1 grain each time you push the "SET" button. After 70 grains (90 grains for *BigBoss*®) the read-out will return to 1, and continue to count up from 1 until the display number matches the hardness number. (See setting conversion chart on page 34 for *cityBoss*®) After 5 seconds the display will change to show "gallons remaining (x 100). To recheck the hardness, touch "SET."

2) GALLONS REMAINING
After setting water hardness, gallons remaining until the next automatic regeneration is shown by the read-out lights. NOTE: Gallons remaining are in hundreds. 12=1,200 gallons

3) RECHARGE/REGENERATION STATUS
Regeneration cycle numbers are shown during regeneration. The read-out will flash with the cycle number. The flashing regeneration numbers are:

(01) First Backwash
(02) Brine/Slow Rinse
(03) Second Backwash
(04) Brine Refill
(05) Service

See pages 11 and 12 for cycle descriptions and illustrations
To quickly advance through the regeneration cycles, press and hold the Immediate Recharge button for 5 seconds. Wait for the cycle to begin, after 20 seconds press and hold the Immediate Recharge button until the cycle number changes (about 5 seconds.) Each cycle can be advanced in this manner.

4) CONTROLLER STATUS LIGHT
It is normal for the light to blink in the digital readout window. This indicates the controller is operating properly. See page 9.

5) waterMizer
The waterMizer® light will blink whenever water is being used. See figure 9. Does not apply to the *waterBoss*® Filters. See separate start up procedures. Pages 35, 36, and 37.

6) IMMEDIATE RECHARGE
To start an immediate regeneration, press The "IMMEDIATE RECHARGE" button and hold for 5 seconds. The Immediate Recharge button is used when starting your water conditioner, to start an immediate regeneration, or to restore capacity if you have run out of salt. If your *waterBoss*® has run out of salt, you may not have soft water available. Remove the salt lid and add salt. Wait two hours, then press the "IMMEDIATE RECHARGE" button and hold for 5 seconds. See figure 9.

Setting The Controller - Continued

7) POWERCLEAN™

The powerClean™ feature is a service/maintenance step for water supplies that have an excessive amount of iron. Activating this feature is a simple push of the powerClean™ button on the controller. A yellow light indicates that the powerClean™ feature is activated. The appliance will regenerate every other day with five pounds of salt. Leave the powerClean™ feature on for a minimum of two weeks. The frequent regeneration will elimate iron buildup in the resin bed. The use of salt with an iron cleaning agent or iron out cleaner is recommended for continuous use as a preventive measure against iron fouling of the resin bed. To deactivate this feature, simply press the powerClean™ button. Use this feature every six months as a part of your routine maintenance procedure to insure a long service life for your water treatment appliance. See figure 9.

DELAYED REGENERATION*

. . . If you wish to regenerate at a specific time.

NOTE: time is set in military time (EXAMPLE: 2 am = 0200.)

1) Enter Setting Number as described in "Demand Regeneration" procedure.

2) Set current time of day in military time to nearest hour.

-Step A: Press "SET" button.

-Step B: Press Immediate Recharge button (status indicator light on; not blinking.)

-Step C: Press "SET" button until current time of day appears in the display. Wait until display returns to "Gallons Remaining" - approximately 10 seconds. Then proceed to set desired time of regeneration. (EXAMPLE: if current time of day is 4:20 pm, set on 16 which represents 1600 military time.) NOTE: if more than 10 seconds lapse between any of the following steps, the display will return to the start point which is "Gallons Remaining."

3) Set desired time of regeneration in military time to nearest hour.

- Step A: Press "SET" button.
- Step B: Press Immediate Recharge button 2 times (status indicator light out.)
- Step C: Press "SET" button until desired time of regeneration appears in the display.

After Step C, the display will return to gallons remaining and it is ready for service. (EXAMPLE: if desired regeneration time is 2:00 am, set on 2 which represents 0200 military time.)

NOTE: if display starts flashing, you have inadvertently held down the Immediate Recharge button for more than 5 seconds and placed the unit into Immediate Regeneration. Let the appliance finish the regeneration sequence, or advance through the cycles as previously described in paragraph 3, page 15.

NOTE: if you desire to return unit to Demand Regeneration when the controller is in Delayed Regeneration, simply set the time of regeneration to "88" (see Delayed Regeneration, Step 3.)

**cityBoss*® for municipally-supplied water operates on Demand Regeneration only.

Advanced Settings For The 3 Button Controller

Adjustable Settings.
Your electronic control has four manual adjustable settings. The adjustments are:

1. Display water remaining in gallons or litres
2. 72-96 hour forced regeneration (on/off) every 4 days minimum regeneration**
3. Backwash #1 cycle length
4. Salt refill cycle length

Making Adjustments.
Remove the 4 housing backplate screws. The switches are located in the upper left of the circuit board. The switches can easily be adjusted using a small, flat blade screwdriver. The switches are "ON" when in the up position and "OFF" when in the down position.

Switch Descriptions.

Switch #1 - LANGUAGE

ON = Display water remaining in litres

* OFF = Display water remaining in gallons

Switch #2 - 72-96 HOUR FORCED REGENERATION

* ON = 72-96 hour forced regeneration activated (every 3-4 days minimum regeneration)

OFF = 72-96 hour forced regeneration deactivated

Switch #3 - BACKWASH #1

ON = 3 minute backwash #1

OFF = 1 minute backwash #1

Switch #4 - BACKWASH #1

ON = 7 minute backwash #1

* OFF = no value

Switches 3 & 4 are used together to set the Backwash #1 cycle time.

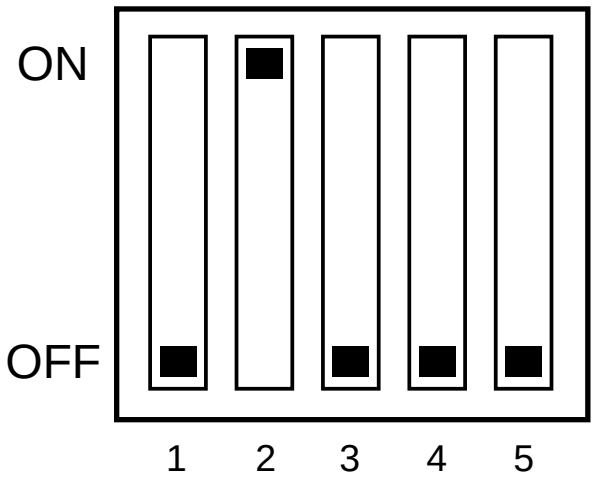
Switch #5 - SALT SETTING

ON = 5.0 minute Brine Refill (7.0# Salt). Brine draw is increased by 10 minutes. Unit capacity - 27,000 at 1 cu. ft. (***BigBoss***)

OFF = 2.6 minutes Brine Refill (3.8# Salt) Unit capacity - 17,800 grains at .7 cu. ft. (***waterBoss***)

* Factory Settings

** If the unit does not regenerate within 72 hours, it will automatically regenerate at the next time of regeneration (TOR), not to exceed 96 hours



Backwash #1 Switch Setting Chart

Switch #3	Switch #4	Backwash #1 Time
OFF	OFF	1	0
ON	OFF	3	1-2
OFF	ON	7	2-3
ON	ON	10	4-10

powerClean™ overrides switches 2-5

Figure 12

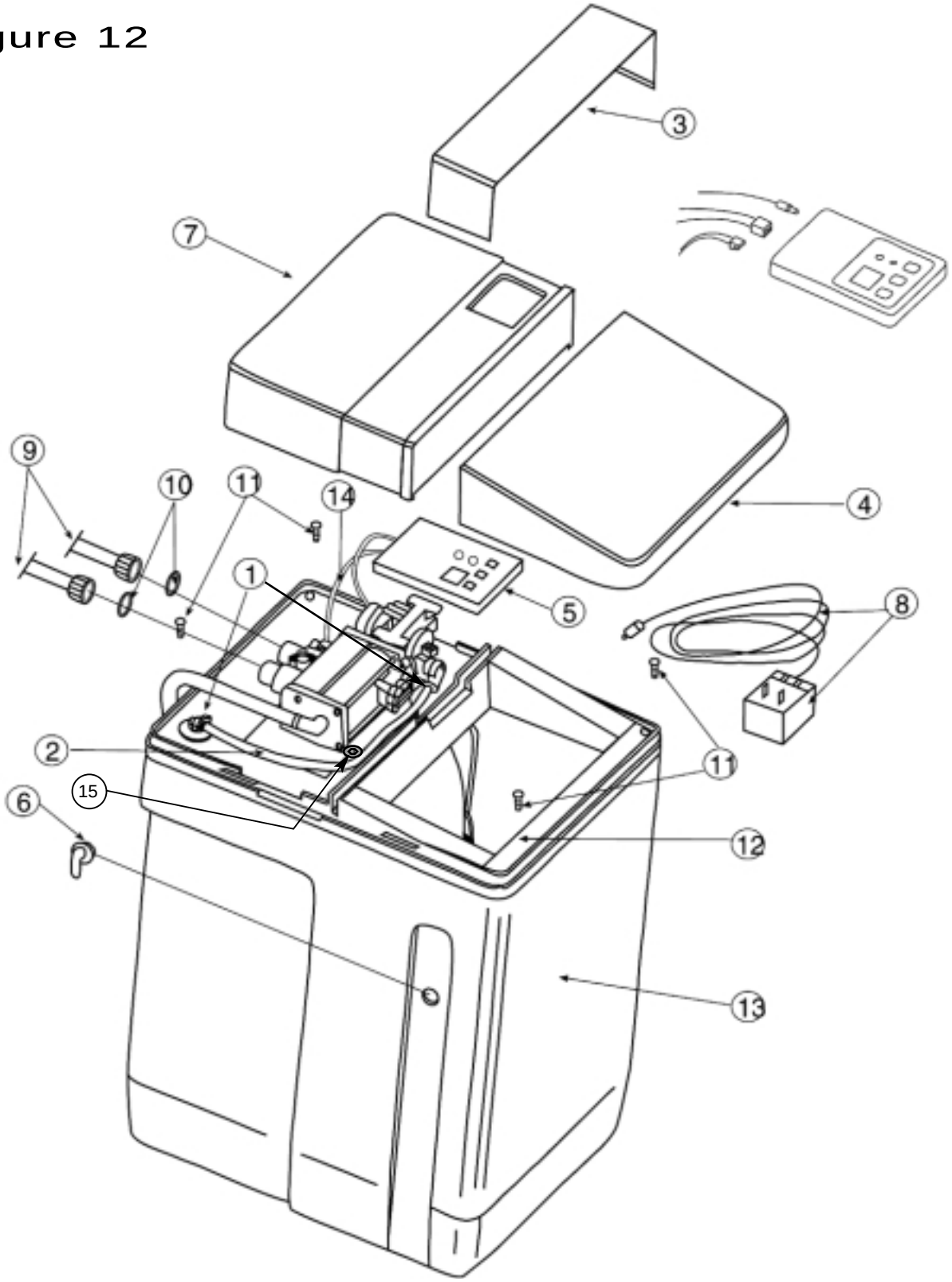
ELECTRONICS AND CABINET

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	93832	Brine Hose Clamp	2
2	93848	3/8” Brine Tubing	1 - 16”
3	93208	Control Panel Cover	1
4	93205	Salt Port Lid	1
5	93582	Computer Control Assembly	1
	93582 BB	Computer Control (BigBoss™)	1
	93582 CB	Computer Control (cityBoss™)	1
	93582 IF	Computer Control (Iron Filter)	1
	93582 CF	Computer Control (Carbon Filter)	1
	93582 NF	Computer Control (Acid Neutralizing Filter)	1
6	C0700	2-pc. Overflow	1
7	93513-WB	Valve Cover Assembly	1
8	93245	12 Volt Transformer/Power Cord	1
9	93813	Flexible Connectors	2
10	93879	Flexible Connector Gasket	4
11	90832	Cabinet Cover Clip	4
12	93202	Support Panel	1
	93202-C	Support Panel, CityBoss (not shown)	1
	93247	Filters Support Panels (not shown)	1
13	93204	waterBoss®/CityBoss™ Cabinet	1
	97201	BigBoss™/Filter Cabinet	1
14	93858	Turbine Assembly Sensor	1
15	90618-Top	Top Fill Plug Assembly	1

NOTE - See Appendix on page 39 for Bottom Fill Plug Assembly

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 12



When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 13

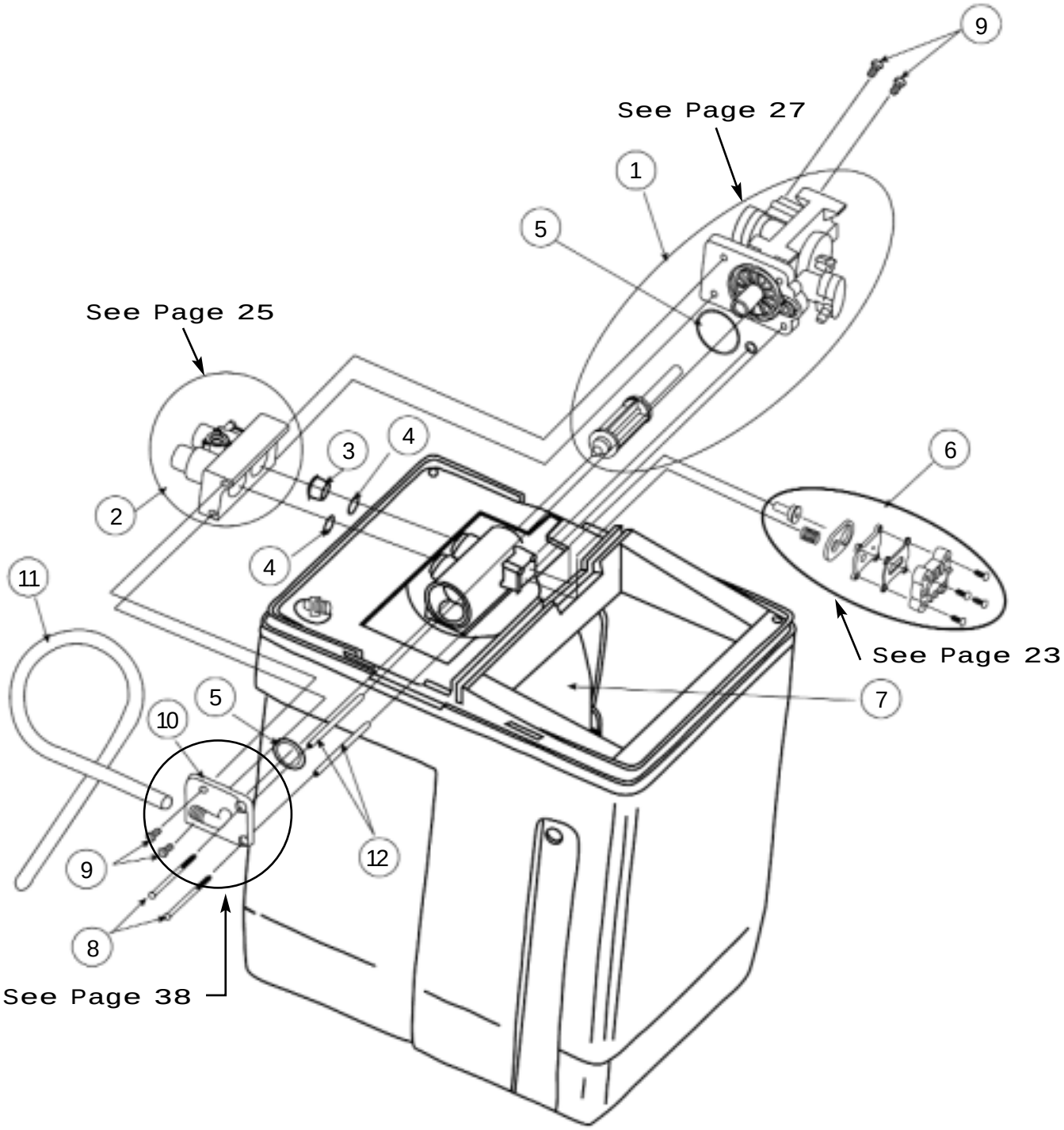
Cabinet and Assemblies

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	95301T	Drive End Cap Assembly	1
2	93505	3/4" IO Adapter Assembly	1
3	93229	Flow Director	1
4	93838	IO Adapter “O” Ring	2
5	93808	End Cap “O” Ring	2
6	93501	Injector Assembly	1
7	93530	Resin Tank Assembly - (waterBoss / cityBoss empty)	1
	95505	Resin Tank Assembly - (BigBoss empty)	1
	97505	Greensand Media Tank, complete	1
	97506	Media Tank Assembly (Filters, empty)	1
	97507	Carbon Media Tank, complete	1
	97508	Acid Neutralizer Media Tank, complete	1
	93846-5	Super Fine Mesh Resin	.5 cu.ft.
	93846	Super Fine Mesh Resin	.7 cu.ft.
	M020-1	Super Fine Mesh Resin (BigBoss)	1.0 cu.ft.
	M1	Power Clean Filter Media- (waterBoss / BigBoss)	1.25 lb.
	93703	Activated Carbon (cityBoss)	.15 cu ft
	93702	Redox Media (cityBoss)	4 lbs
8	93809	Screw	2
9	93870	Screw	4
10	93524	Drain End Cap	1
	93524 F	Drain End Cap For Filters	1
11	93842	Drain Hose	8’
12	93835	Spacer Tube	2

NOTE - See Appendix on page 38 for Drain End Cap Assembly

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 13



When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 14

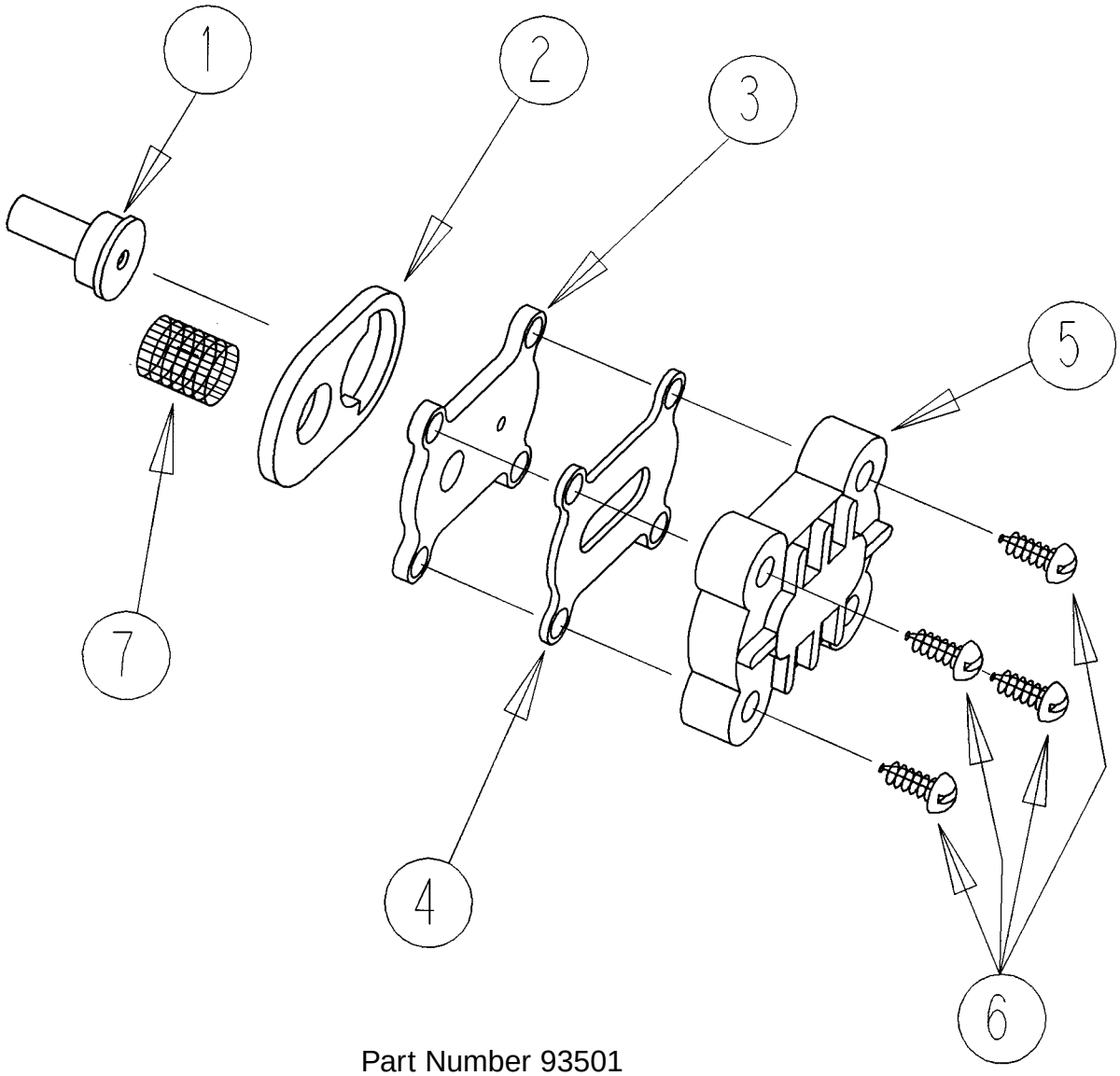
Injector Assembly

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	93223	Injector Throat	1
2	93220	Bottom (Thick) Injector Seal	1
3	93221	Injector Nozzel	1
4	93232	Bottom (Thin) Injector Seal	1
5	93222	Injector Cap	1
6	90807	Injector Screw	4
7	93810	Injector Screen	1
	93501	Injector Assembly (Includes all above items)	1

Note: When working on the injector assembly, make sure part #2 aligns properly with the outline marked on part #3.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 14



Part Number 93501
Injector Assembly Contains
All Of The Above Parts.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

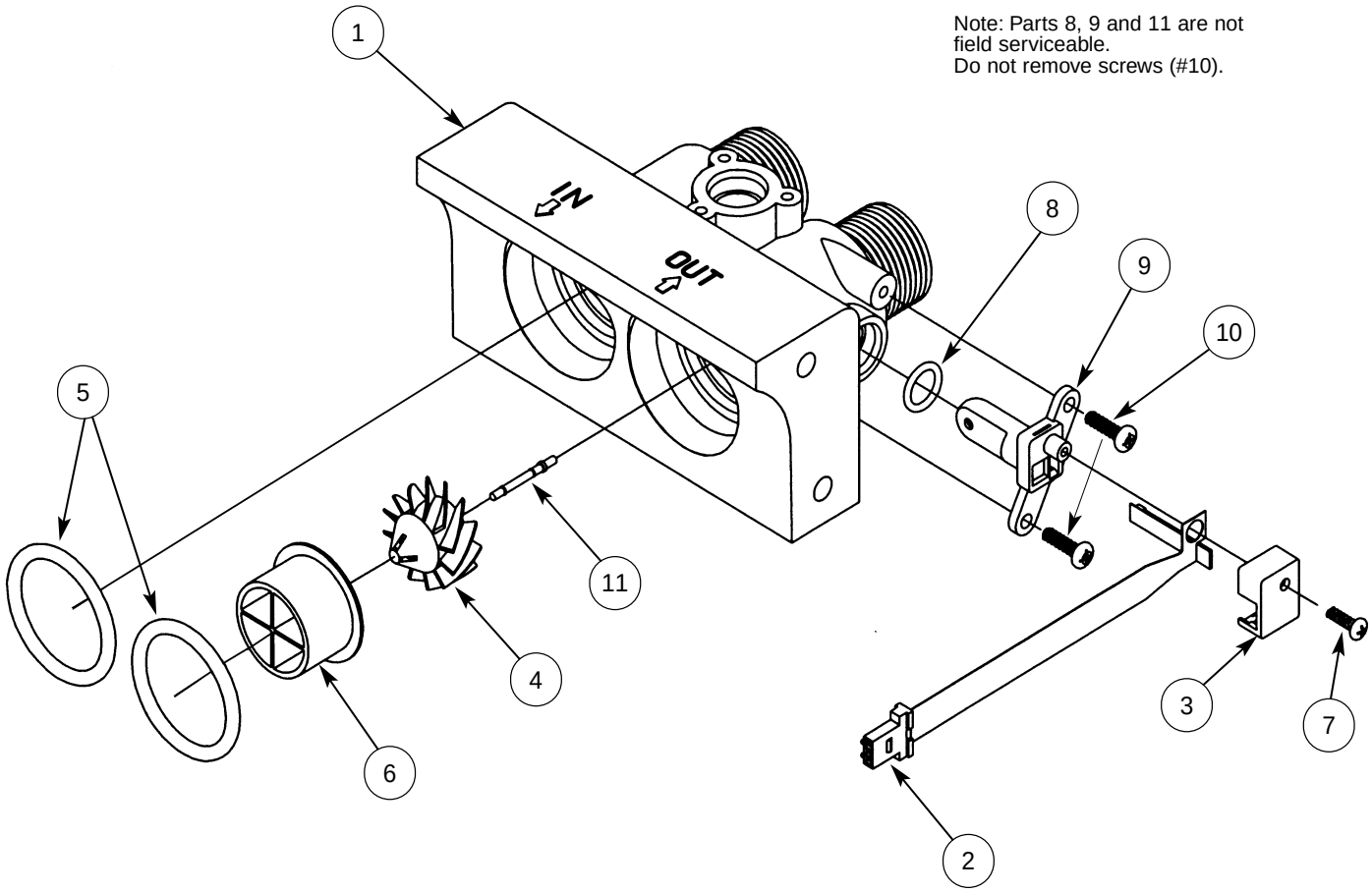
Figure 15

I/O Adapter Assembly

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	93227	3/4" IO Adapter	1
2	93858	Turbine Sensor Assembly	1
3	90232	Turbine Sensor Cap	1
4	90522	Turbine Assembly	1
5	93838	“O” Ring	2
6	93229	Flow Director	1
7	90809	Sensor Cap Screw	1
8	90828	Test Port / Sensor Housing O-ring	1
9	93271	Turbine Sensor Housing	1
10	90802	Turbine Sensor Housing Screw	2
11	90245	Turbine Axle	1
	93505	I/O Adapter Assembly (contains items 1-11)	

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 15



Part Number 93505
I.O. Adapter Assembly Contains
All Of The Above Parts.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

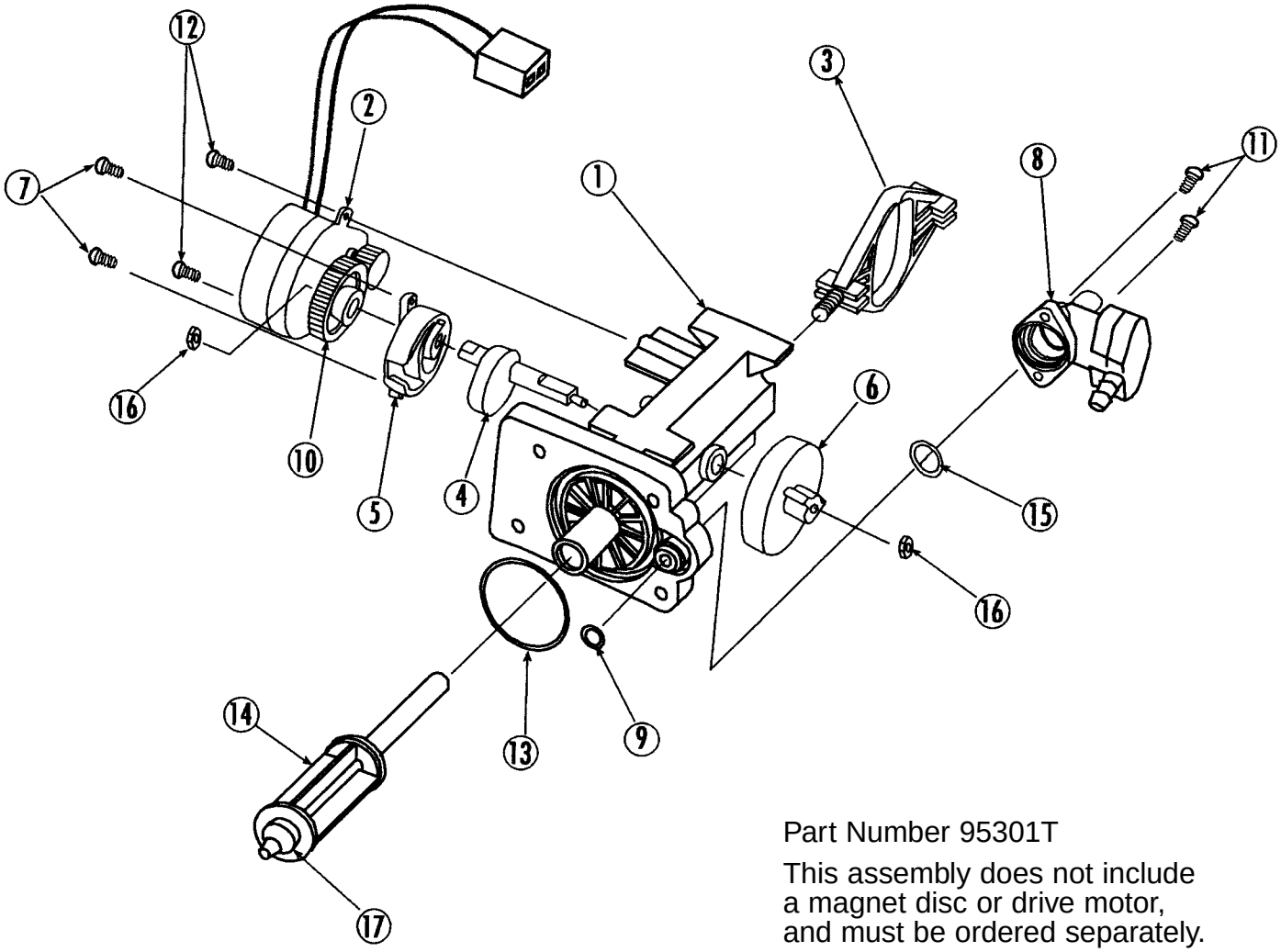
Figure 16

Drive End Cap Assembly

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	93583	Drive End Cap	1
	93583T	Drive End Cap, AC/NF Filters	1
2	90217	Drive Motor - 12V	1
3	93216	Piston Slide	1
4	93217	Piston Slide Cam	1
5	93219	Piston Slide Cam Cover	1
6	95521	Magnetic Disc	1
7	90809	Screw, (self tapping)	2
8	93514-A	Brine Valve Housing Assembly	1
9	90828	O-Ring	1
10	93238	Drive Gear	1
11	90818	Screw, (self tapping)	2
12	90802	Screw, (self tapping)	2
13	93808	End Cap “O Ring”	1
14	93522-A	Piston Assembly	1
15	93803	Brine Valve Housing “O” Ring	1
16	93891	1/4” Hex Nut 2	
17	93839	Drain Gasket 1	
	95301T	Drive End Cap Assembly	1
	95302T BWO	Drive End Cap Assembly For Carbon and Acid Neutralizing Filters only. (Not Shown)	1

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 16



Part Number 95301T

This assembly does not include a magnet disc or drive motor, and must be ordered separately.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

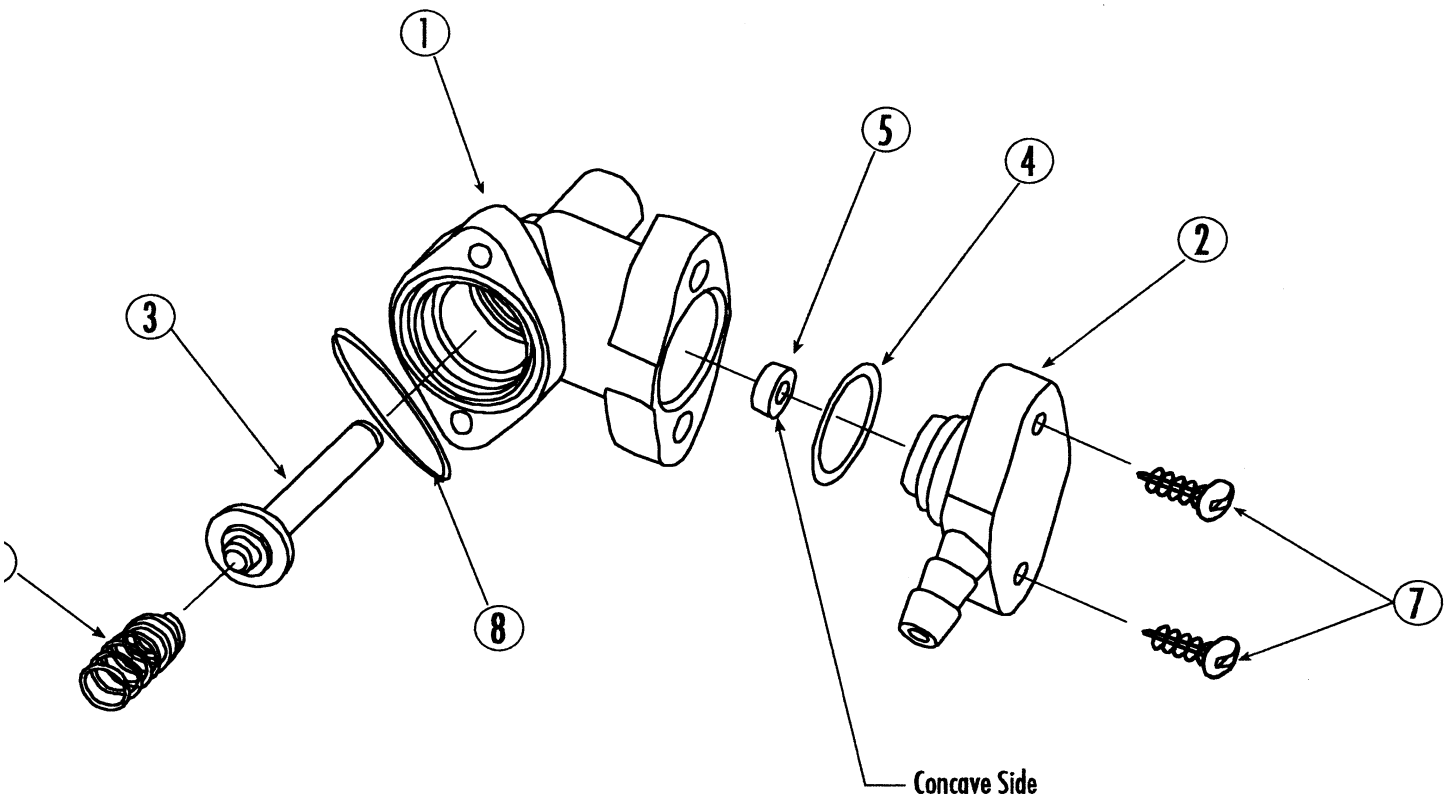
Figure 17

Brine Valve Housing Assembly

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	93511-A	Housing	1
2	93243	Housing Cap	1
3	90521	Piston Assembly	1
4	93805	“O” Ring	1
5	90843	.5 GPM Flow Control	1
6	93802	Piston Spring	1
7	90807	Screw	2
8	93803	“O” Ring	1
	93514-A	Brine Valve Housing Assembly	1

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 17



Part Number 93514-A
Brine Valve Assembly Contains
All Of The Above Parts.

Note: This part is not used on
backwash only filters.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 18

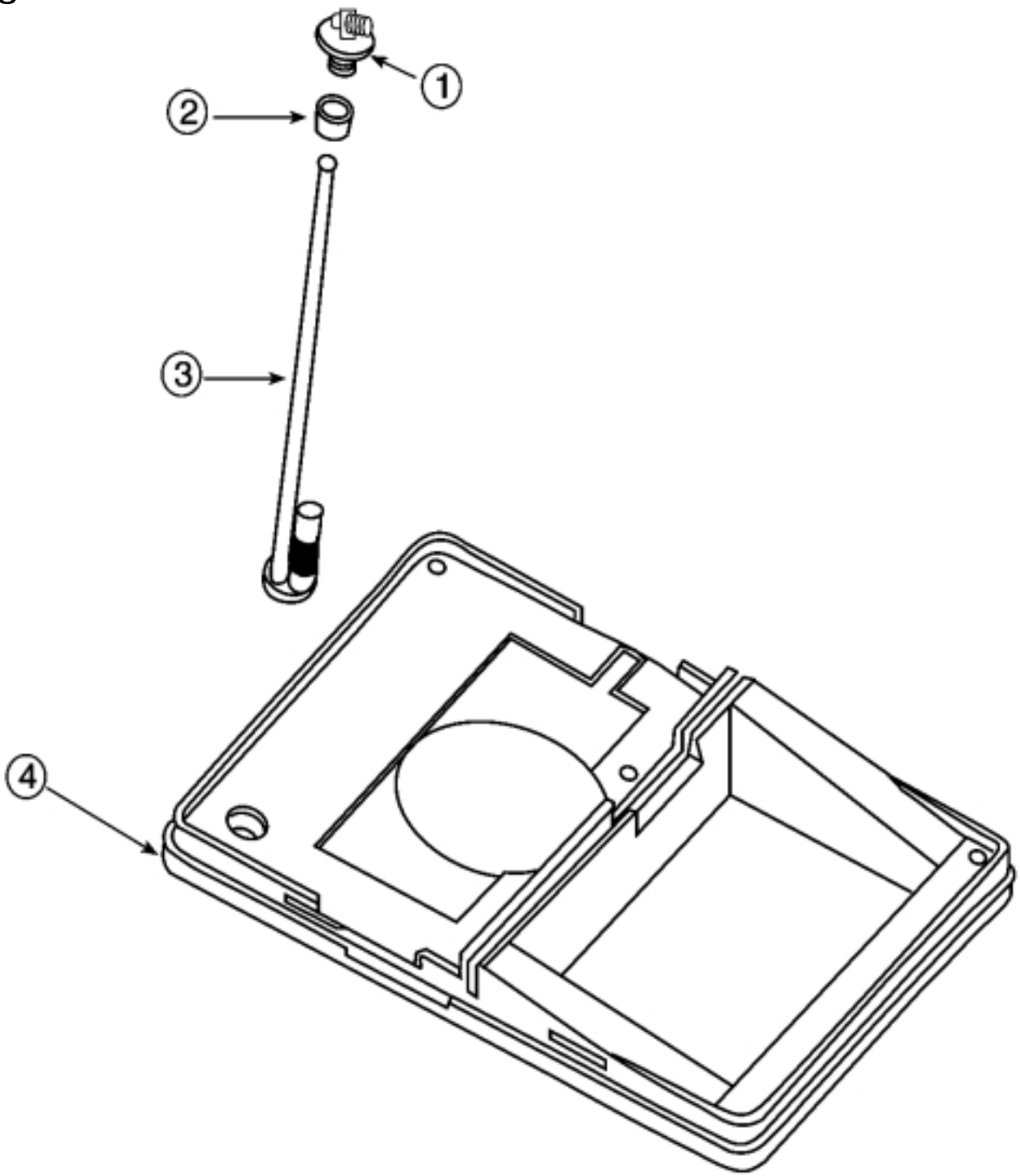
Support Panel Assembly

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	93240	Refill Elbow	1
2	90846	Refill Nut	1
3	93882	Air Check Draw Tube-waterBoss/cityBoss	1
	93882-25.75	Air Check Draw Tube-BigBoss	1
4	93202	Support Panel	1
	93202-F	Support Panel-Filters	1

NOTE - See Appendix on page 39 for Iron Filter Safty Shutoff Assembly

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Figure 18



When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Troubleshooting

Problem	Cause	Solution
No soft water after regeneration.	No salt in brine cabinet.	Add salt (refer to "Immediate Recharge" Page 15)
	Sediment in brine tank has plugged the brine line and air check (page 31).	Remove air check draw tube and flush with clean water. Clean injector assembly. Clean any sediment from brine cabinet.
	Drain line is pinched, frozen or restricted.	Straighten, thaw or unclog the drain line.
	Clogged injector assembly (page 23).	Remove injector cap and clean nozzle and throat with a wooden toothpick. Clean screen and replace throat if removed.
	Salt bridge has formed.	High humidity or the wrong kind of salt can create a salt bridge. This is a crust that forms an empty space between the water and salt. To test, use a blunt object like a broom handle. Push the handle into the salt to dislodge the salt bridge.
No soft water.	The plumbing bypass valve is in the the bypass position (page 7).	Place bypass valve in the service position.
	Unit is plumbed backwards.	Check that unit is plumbed correctly.
	Extended power outage.	Reset hardness (refer to “Immediate Recharge” Page 15).
	Water hardness has increased.	Reset water and reset hardness.
	Not metering water.	Check waterMizer light. Light should flash with water usage. If no light, see below.
waterMizer light does not blink when water is flowing.	The plumbing bypass valve is in the the bypass position (page 7).	Place bypass valve in the service position.
	Unit is plumbed backwards.	Check that unit is plumbed correctly.
	Sensor not receiving signal from magnet on turbine (page 25).	Remove sensor from IO housing. Test by placing magnet on the sensor chip. If light glows, clean or replace turbine. If no light, replace sensor.
waterMizer light blinks when water is not being used.	There is a leak in your hosehold plumbing system.	Repair the leak.
waterMizer light on steady.	Turbine stopped over sensor.	Run water. Verify flashing light.
Read-out lights do not glow.	Electric cord is unplugged.	Plug in transformer.
	No electric power at outlet.	Check power source. Make sure outlet is not controlled by a switch.
	Defective transformer (fig. 8).	Test with volt meter for 12 VAC at control. If 0 VAC, replace transformer.

Troubleshooting

Problem	Cause	Solution
Read-out lights do not glow.	Defective circuit board (fig. 9).	With 12 VAC present at controller, replace circuit board.
Unit stays in regeneration. Cycle numbers remain flashing.	Computer control not attached properly.	Make sure computer control is pushed all the way onto drive end cap.
	Foreign object in valve body.	Remove foreign objects from valve body.
	Broken valve assembly. Motor running. Magnet disc not turning (pages 26 - 27).	Repair drive end cap.
Excess water in brine tank. Should be approximately 6 - 8" with salt for waterBoss, and cityBoss, and 8-10” for BigBoss.	Restricted, frozen or pinched drain line.	Remove restriction, thaw or straighten drain line.
	Plugged brine line, brine line flow control or air check (pages 28-31).	Clean flow control, air check and brine line. Clean any sediment from brine cabinet.
	Plugged injector assembly (pages 22-23).	Clean or replace injector. Replace throat if removed.
	Sticking brine refill valve.	Remove brine valve. Lubricate piston with silicone grease and reassemble.
Not regenerating in proper sequence.	Magnet disc defective.	Replace magnet disc.
	Defective position sensor.	Replace control.
Salty water.	Plugged Injector.	Clean injector screen, nozzle and throat. See figure 14 page 23.
	Low water pressure.	Maintain min. pressure of 30 psi. See specifications page 40-41.
	Drain line or flow control restricted.	Remove restrictions.
	Brine line restricted or crimped.	Remove restrictions, replace if crimped.
	Excessive amount of water in brine cabinet.	Verify correct water level relative to salt setting. Check lines for loose connections.
	Intermittent pressure drop from feed source.	Verify adequate pressure and volume of water supply. See specifications page 40-41.

3 Button Controller

Display Indications	Display Numbers	Status Indicator Light
Service	Lit solid showing gallons remaining x 100	Blinking
Calling for regeneration	Displaying "00"	Blinking or steady
Regeneration cycle	Blinking numbers from "01" to "05"	Blinking

Hardness Setting Conversion Chart

For *cityBoss*® Model Only

Setting is calculated by multiplying compensated hardness by 1.4

If Your Compensated Hardness Is	Your Setting Is
1	2
2	3
3	5
4	6
5	7
6	9
7	10
8	12
9	13
10	14
11	16
12	17
13	19
14	20
15	21
16	23
17	24
18	26
19	27
20	28
21	30
22	31
23	33
24	34
25	35

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Start-Up Procedure

Model 97WB-ANF Acid Neutralizing Filter

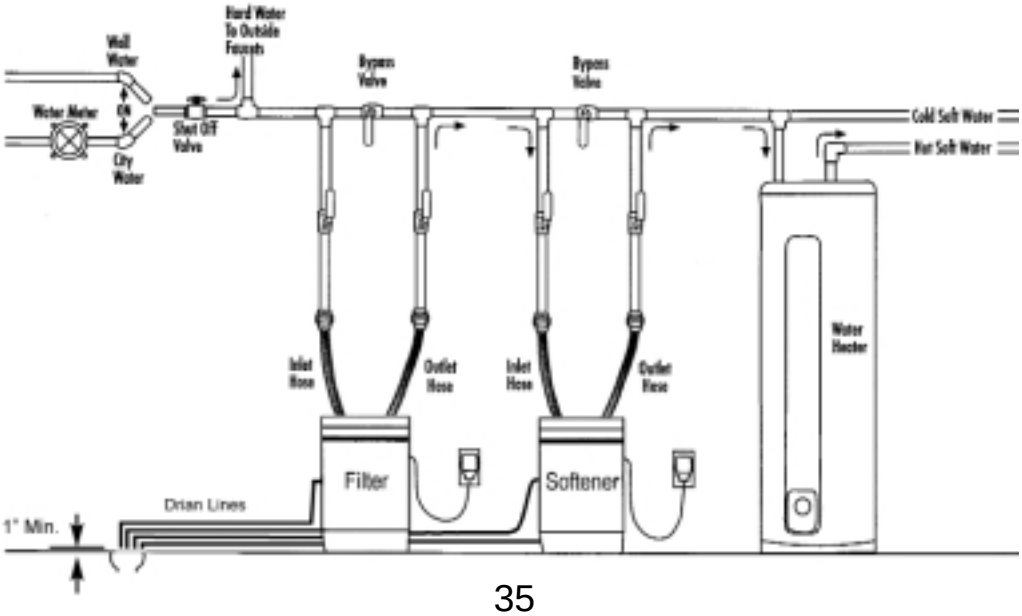
Your *waterBoss*® Acid Neutralizing filter will backwash every two days. This has been preprogrammed for you at the factory and is indicated by the yellow power clean light on the controller. It is important that this light be on at all times. If you notice that the power clean light is out, simply push the power clean button to activate the yellow light. All you will have to do is set the time of day and the desired time of regeneration by following the procedure outlined on page 16 of your installation and service manual. Caution: Set filter regeneration time 2 hours after the softener regeneration time.

IMPORTANT: Because the 97WB-ANF is capable of elevating a low pH condition in the water, it is important that the filter be applied within the operating limits outlined on page 41 of your installation and service manual. Failure to comply with these specifications will cause poor backwash results and possibly a malfunction of the control valve. Additionally, it will be necessary to add two to five pounds of the neutralizing media to the filter tank annually. The media slowly dissolves and thereby corrects the corrosive characteristic of the water. The hardness will increase by two to four grains per gallon. Check the total hardness of the water after start-up of the neutralizer and set your water softener accordingly.

INSTALLATION TIP: Before placing this filter in service it will be necessary to backwash the filter to remove media fines in the filter bed. To backwash the filter, push and hold the immediate recharge button until the controller indicates cycle 01 (flashing). After 36 minutes, the controller will return to the service mode and display 03 or 04 (solid). Retest the hardness before the water enters the softener and reset the hardness setting of the softener. The pH value should be adjusted to at least 7.0 after installation.

NOTE: This filter should be installed after the pressure tank or water meter and before the *waterBoss*® water softener unless otherwise recommended. (See illustration). A minimum of ¾" pipe is required for proper function of the filter. It is important to examine the inlet piping to make sure the pipe is not plugged with iron. If the piping is plugged, it must be cleaned or replaced.

CAUTION: The calcite/corosex media in your unit gradually dissolves as it treats low pH water. Determine the amount of media in your unit by first depressurizing your unit. Next, remove the fill plug at the top of your unit. Move a dowel down the fill plug opening until it contacts the calcite/corosex media. Mark the dowel where it is level with the top of the fill plug opening. If the distance between the mark and the end of the dowel is less than 6", replace the fill plug and place your unit back in service. If it is more that 8", call your HelpLine for further instructions and to order new calcite/corosex media.



Start-Up Procedure

Model 97WB-IF Iron Filter

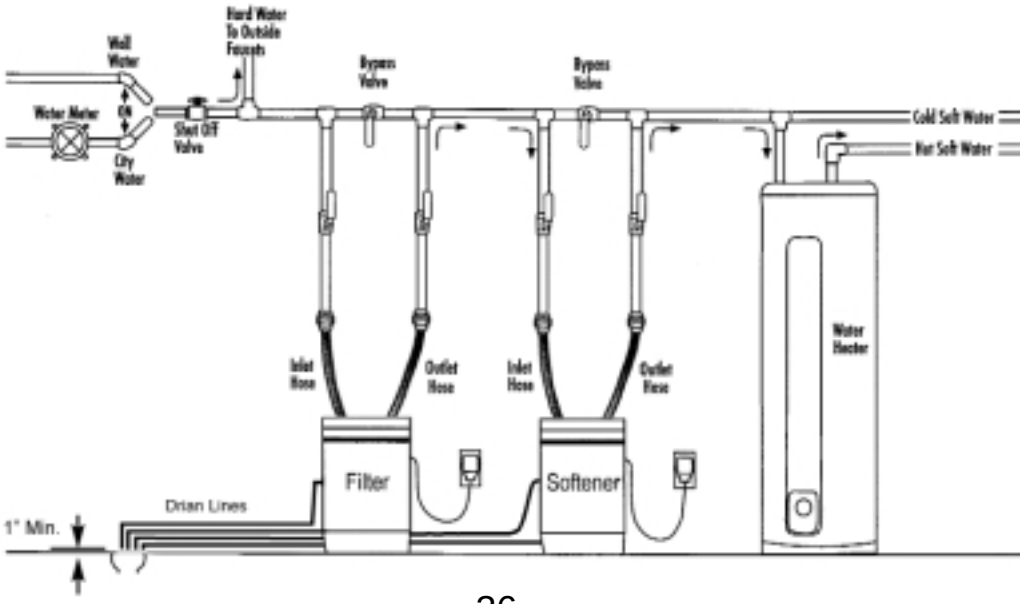
Your *waterBoss*® Iron filter will regenerate every three to four days. This has been preprogrammed for you at the factory. All you will have to do is set the time of day and the desired time of regeneration by following the procedure outlined on page 16 of your installation and service manual. Caution: Set filter regeneration time 2 hours after the softener regeneration time.

IMPORTANT: Because the 97WB-IF is capable of treating a combination of undesirable constituents in the water (iron and/or hydrogen sulfide), it is important that the filter be applied within the operating limits outlined on page 41 of your installation and service manual. Failure to comply with these specifications will cause poor regeneration results and possibly a malfunction of the control valve.

INSTALLATION TIP: Before placing the filter in service, add three gallons of water to the cabinet. Make sure the Potassium Permanganate ($KMnO_4$) has been thoroughly mixed as indicated below. To start a regeneration, push and hold the immediate recharge button until the controller indicates cycle 01(flashing). After 33 minutes, the filter will return to service mode and display 03 or 04 (solid).

NOTE: This filter should be installed after the pressure tank or water meter and before the *waterBoss*® water softener unless otherwise recommended (See illustration). A minimum ¾" pipe is required for proper function of the filter. It is also important to examine the inlet piping to make sure the pipe is not plugged with lime or iron. If the piping is plugged, it must be cleaned or replaced.

CAUTION: When adding the Potassium Permanganate ($KMnO_4$), use care when opening the container and pouring it into the cabinet. Stir the Potassium Permanganate ($KMnO_4$) until the color is a dark walnut and stir every two weeks. Follow the safety precautions on the container.
A three pound bottle of Potassium Permanganate ($KMnO_4$) will last approximately three months. Coarse granular Potassium Permanganate ($KMnO_4$) is recommended for this filter appliance (P/N 97804). Fine granular potassium permanganate can be drawn into the filter as a solid rather than a liquid. For further operating and handling instructions, refer to the product label on the Potassium Permanganate bottle.



Start-Up Procedure

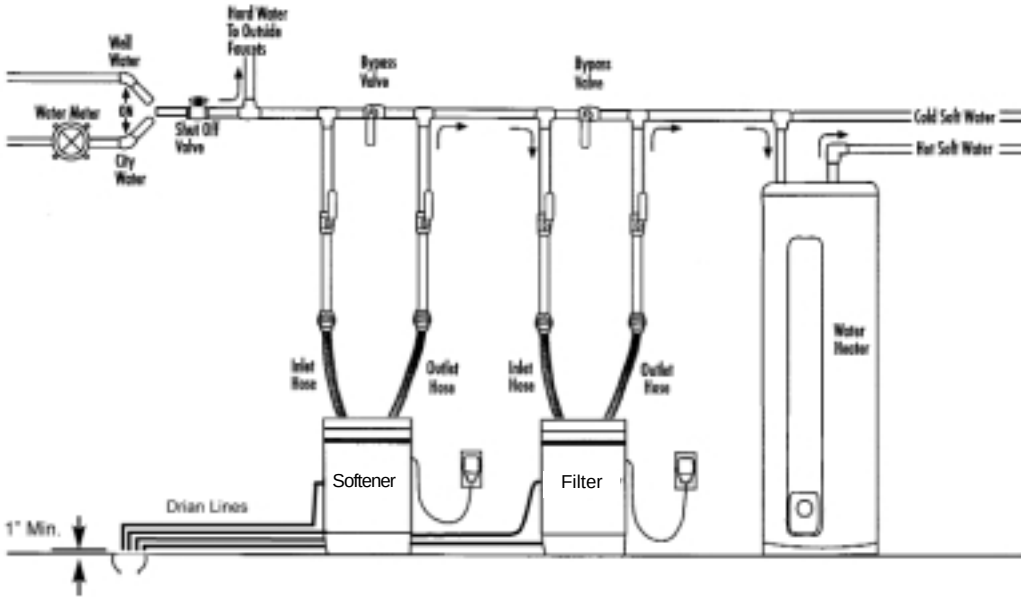
Model 97WB-CF Carbon Filter

Your *waterBoss*® Carbon filter will backwash every three to four days. This has been preprogrammed for you at the factory. All you will have to do is set the time of day and the desired time of regeneration by following the procedure outlined on page 16 of your installation and service manual. Caution: Set filter regeneration time 2 hours after the softener regeneration time.

IMPORTANT: Because the 97WB-CF is capable of treating a combination of undesirable constituents in the water (chlorine, taste and odor), it is important that the filter be applied within the operating limits outlined on page 41 of your installation and service manual. Failure to comply with these specifications will cause poor backwash results and possibly a malfunction of the control valve.

NOTE: This filter should be installed after the pressure tank or water meter and after the *waterBoss*® water softener unless otherwise recommended. (See illustration). A minimum ¾" pipe is required for proper function of the filter. It is also important to examine the inlet piping to make sure the pipe is not plugged with lime. If the piping is plugged, it must be cleaned or replaced.

The carbon media in this filter may need to be changed periodically. If you notice disagreeable tastes and odors returning to your water, call the HelpLine for further instructions and to order new carbon media.

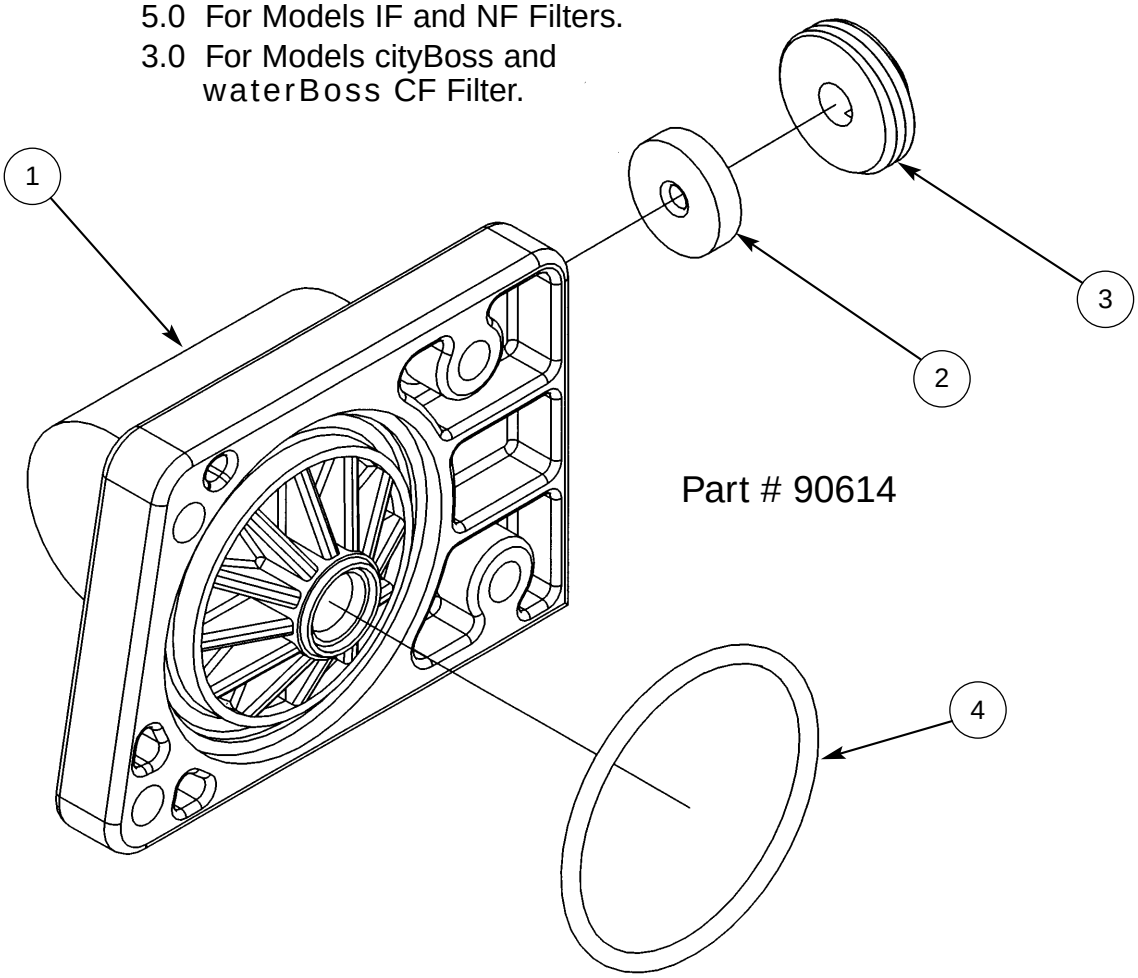


Parts Appendix

Drain End Cap Assembly

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	90268	Drain End Cap (Threaded)	1
2	H2086-5.0	Drain Line Flow Control Button	1
	H2086-3.0	Drain Line Flow Control Button	1
3	90267	Retainer	1
4	93808	“O” Ring	1
	90614	Drain End Cap Assembly (1-4)	1
5	V185	Drain Line Fitting (not shown)	1

Flow Control Button Sizes:
5.0 For Models IF and NF Filters.
3.0 For Models cityBoss and waterBoss CF Filter.



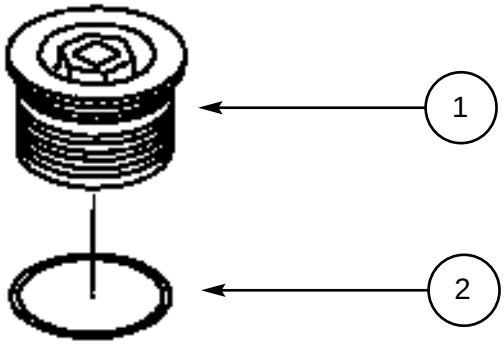
Part # 90614

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Parts Appendix

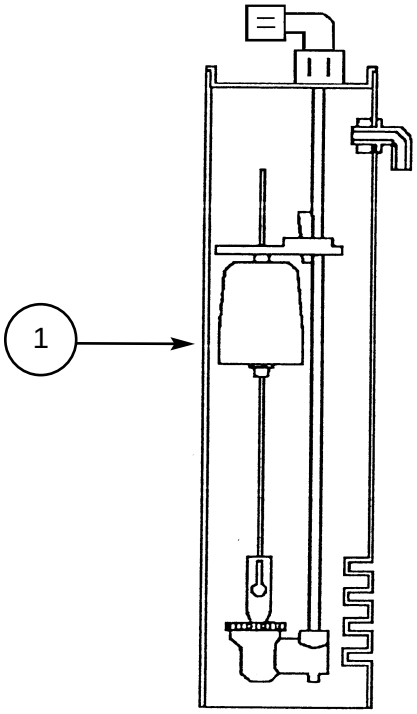
Fill Plug Assemblies

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	90618	Bottom Fill Plug Assembly With ”O” Rings	1
2	90819	Bottom Fill Plug ”O” Rings	2

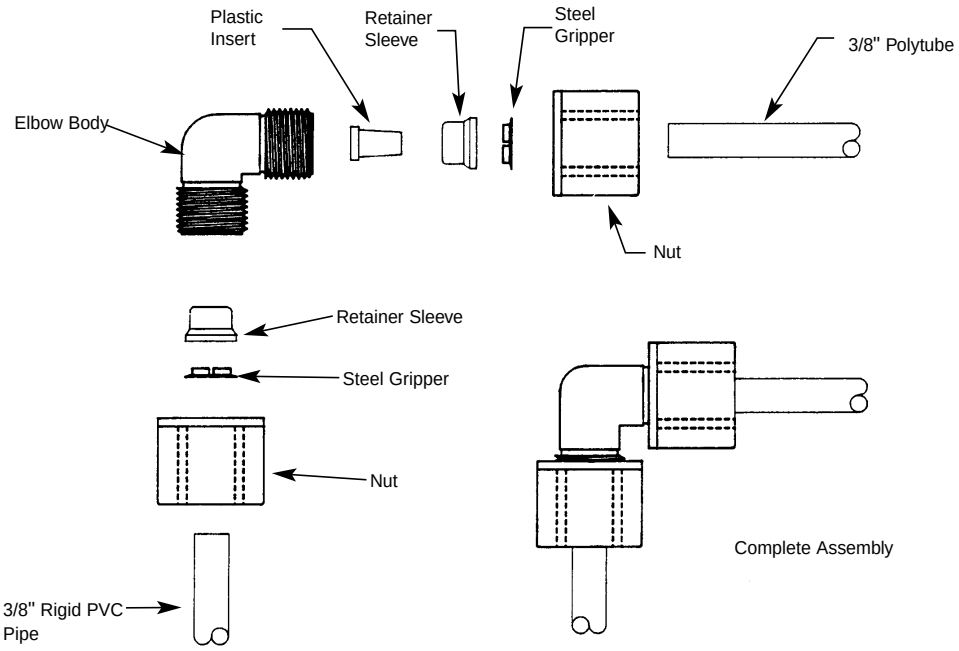


Iron Filter Safety Shutoff Assembly

FIGURE#	PART#	DESCRIPTION	QUANTITY
1	93811-19.5WB	Air Check / Brine Well Assembly For Iron Filter Only	1



Brine Valve Elbow Assembly



The nut, gripper and retainer sleeve are a 3 piece assembly that can come apart if removed from the elbow body. Parts must be re-assembled exactly as shown to function properly.

Softener Specifications

MODEL #	waterBoss	BigBoss	cityBoss
Maximum compensated hardness (grains)	70	90	25
Maximum ferrous iron reduction	10 ppm	10 ppm	0
Minimum pH	7	7	7
Media type and amounts	Power Clean Filter Media Super Fine Mesh Resin - .7	Power Clean Filter Media Super Fine Mesh Resin - 1	Redox Media - 4 lbs Activated carbon - .15 cu. ft. Super Fine Mesh Resin - .5
Salt usage (lbs.) / Capacity	3.8 / 17,800	7.0 / 27,000	3.8 / 12,800
Maximum water temperature	120ºF	120ºF	120ºF
Mineral tank size	10.5 X 14" I.D.	10.5 X 21" I.D.	10.5 X 14" I.D.
Peak flow rate / psi drop	16 gpm/15	10 gpm/14.5	10 gpm/15
Pressure drop @ service flow rate of 4 gpm	3.2	4.0	3.2
Maximum flow rate to drain during regeneration (backwash gpm)	2.0	2.0	3.0
Water Pressure (minimum-maximum psi)	20 / 120	20 / 120	20 / 120
Minimum water volume required (gpm)	5	5	5
Maximum Chlorine (ppm)	1	1	2
Controller type	3 Button	3 Button	3 Button
Regeneration time (minutes)	26	37 min	26
Water used per regeneration (gallons)	15.0	21.0	17.0
Frequency of regeneration (days)	Demand	Demand	Demand
Salt Storage	120 lbs.	160 lbs.	120 lbs.
Height (in.)	23.5"	30.5"	23.5"
Footprint (in.)	14.5" X 19"	14.5" X 19"	14.5" X 19"
Electrical Rating	12VAC, 1 phase60 Hz	12VAC, 1 phase60 Hz	12VAC, 1
Plumbing Connections	phase60 Hz		
Shipping Weight - Approximate (lbs.)	3/4 " MPT	3/4" MPT	3/4" MPT
	85 lbs	105 lbs	85 lbs

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Filter Specifications

MODEL #	97WB-IF	97WB-CF	97WB-ANF
Maximum compensated hardness (grains)	N/A	N/A	N/A
Maximum ferrous iron reduction	15 ppm	N/A	N/A
Minimum pH	7	N/A	6.3
Media type and amounts	Greensand .7 cu. ft.	Carbon .7 cu. ft.	Calcite/Corosex .7 cu. ft.
Salt usage (lbs.) / Capacity	4 oz. Potassium Permanganate	Backwash Only	Backwash Only
Maximum water temperature	80ºF	120ºF	120ºF
Mineral tank size	10.5 X 21" I.D.	10.5 X 21" I.D.	10.5 X 21" I.D.
Peak flow rate / psi drop	7 gpm/15	7 gpm/15	6 gpm/15
Pressure drop @ service flow rate of 4 gpm	9	9	9
Maximum flow rate to drain during regeneration (backwash gpm)	5.0	3.0	5.0
Water Pressure (minimum-maximum psi)	30 / 120	30 / 120	30 / 120
Minimum water volume required (gpm)	5	5	5
Controller type	3 Button	3 Button	3 Button
Regeneration time (minutes)	33	29	36
Water used per regeneration (gallons)	52.5	32.5	45
Frequency of regeneration (days)	4	4	2
Salt Storage	5 lb*	N/A	N/A
Height (in.)	30.5"	30.5"	30.5"
Footprint (in.)	14.5" X 19"	14.5" X 19"	14.5" X 19"
Electrical Rating	12VAC, 1 phase60 Hz	12VAC, 1 phase60 Hz	12VAC, 1
Plumbing Connections	phase60 Hz		
Shipping Weight - Approximate (lbs.)	3/4" MPT	3/4" MPT	3/4" MPT

* Potassium Permanganate

Note: The iron filter operates in the same manner as the *waterBoss*® Softeners, but with manganese greensand in place of the super fine mesh resin. The filter uses a potassium permangante ($KMnO_4$) solution for regeneration instead of salt brine. In service, the filter media aids in oxidizing the iron, manganese and/or hydrogen sulfide to a solid particle, trapping it in the filter bed.

Install before your water conditioner. *waterBoss*® Model 97WB-IF Iron Filter automatically reduces iron, Hydrogen Sulfide and iron bacteria.

Install after your water conditioner. *waterBoss*® Model 97WB-CF Carbon Filter with the activated carbon filtering bed, chlorine, taste and odor are automatically reduced - including most organic and man-made pollutants.
Note: This filter can be installed before water conditioner in special situations.
Call Helpline for specific applications.

Install before your water conditioner. *waterBoss*® Model 97WB-ANF Acid Neutralizing Filter automatically neutralizes low pH water. This will increase the water hardness by 2-4 grains.

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993. Your serial number may be found on top of your valve assembly (See figures 2-3.)

Limited Warranty

To Whom Warranty is Extended

This warranty is issued to the original owner at the original location site and is not transferable to other sites or to subsequent owners of the system.

TO PLACE THE EQUIPMENT UNDER WARRANTY, THE WARRANTY REGISTRATION CARD MUST BE COMPLETED AND RETURNED BY THE ORIGINAL OWNER TO ***waterBoss***® WITHIN 30 DAYS OF INSTALLATION.

Coverage

This limited warranty covers the ***waterBoss***® systems delivered to the original owner at the original location when the system is purchased for personal, family, or household use. It is intended to cover defects occurring in workmanship or materials or both.

Warrantor's Performance and Length of Limited warranty -

waterBoss® warrants that upon receipt from the original owner of any mechanical or electronic part which is found to be defective in materials or workmanship, ***waterBoss***® will repair or replace the defective item for 3 years from date of original installation.

waterBoss® further warrants that upon receipt from the original owner of any ***waterBoss***® media tank / valve body, brine cabinet, found to be defective in material or workmanship, ***waterBoss***® will repair or replace the defective item for 10 years from date of original installation.

All defective parts must be returned, along with the equipment serial number and date of original installation, to ***waterBoss***® PREPAID, and replacement parts will be returned by ***waterBoss***® to the original owner FREIGHT COLLECT.

FURTHER EXCLUSIONS AND LIMITATIONS ON WARRANTY

THERE ARE NO WARRANTIES OTHER THAN THOSE DESCRIBED IN THIS WARRANTY INSTRUMENT.

This warranty does not cover any service call or labor costs incurred with respect to the removal and replacement of any defective part or parts. ***waterBoss***® will not be liable for, nor will it pay service call or labor charges incurred or expended with respect to this warranty.

In the event the water supply being processed through this product contains bacterial iron, algae, sulphur, tannins, organic matter or other unusual substances, then, unless the system is represented as being capable of handling these substances in the system specifications, other special treatment of the water supply must be used to remove these substances before they enter this product. Otherwise, ***waterBoss***® shall have no obligations under this warranty.

This warranty does not cover damage to a part or parts of the system from causes such as fire, accidents, freezing, or unreasonable use, abuse or neglect by the owner.

This warranty does not cover damage to a part or parts of the system resulting from improper installation. All plumbing and electrical connections should be made in accordance with all local codes and the installation instructions provided with the system. The warranty does not cover damage resulting from use with inadequate or defective plumbing; inadequate or defective water supply or pressure; inadequate or defective house wiring; improper voltage, electrical service, or electrical connections; or violation of applicable building, plumbing, or electrical codes laws, ordinances or regulations.

THIS WARRANTY DOES NOT COVER INCIDENTAL, CONSEQUENTIAL OR SECONDARY DAMAGES.

ANY IMPLIED WARRANTIES ON THE PRODUCT DESCRIBED IN THIS WARRANTY WILL NOT BE EFFECTIVE AFTER THE EXPIRATION OF THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Claims Procedures

Any defects covered by this warranty should be promptly reported to: ***waterBoss***®
4343 South Hamilton Road,
Groveport, Ohio 43125

In writing about the defects, please provide the original owner's name, telephone number and original address, serial number and model number of the product, and date of purchase . ***waterBoss***® reserves the right to replace defective parts with exact duplicates or their equivalent.

For Owner's Reference

Model No. _____

Equipment Serial No. _____

Installation Date _____

Installer's Signature _____

waterBoss® will not accept any returns after 6 months from date of purchase.

Call: 1-800-437-8993
For Return Information

waterBoss®

has the third party listings.

Listed and tested under NSF Standard 44 for Softening Performance, Barium Reduction, and Radium 226/228 Reduction. Water softeners using sodium chloride for regeneration add sodium to the water. Persons who are on sodium restricted diet should consider the added sodium as part of their overall sodium intake.

In Business Since 1956

When calling the HelpLine, please have this guide and the serial number available. From 8 am to 5 pm EST, call 1-800-437-8993.

©1998 ***waterBoss***® P.O. Box 298, Groveport, OH 43125

LITHO USA Form #93966 RV1001HQW